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ROYAL GARDENS, KEW.

BULLETIN

OF

MISCELLANEOUS INFORMATION.

ADDITIONAL SERIES IV.

LIST

OF

PUBLISHED NAMES OF PLANTS INTRODUCED TO CULTIVATION:

1876 TO 1896.

LONDON:
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By DARLING & SON, Ltd., 1–3, Great St. Thomas Apostle, E.C.

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PREFACE.

THE activity of private cultivators and nurserymen is continually enriching our gardens with plants which are either new to cultivation or have been reintroduced after being lost sight of.

Every corner of the world which affords any prospect of rewarding a collector is systematically searched. It would be difficult to estimate the expenditure of money and labour upon this kind of enterprise, which has not seldom been attended with the sacrifice of life.

Unfortunately its results are too often launched upon commerce or otherwise distributed under names which have either been inaccurately determined or are purely fanciful. These names cannot be wholly disregarded, inasmuch as they become current in horticultural literature. It constantly, therefore, becomes necessary to trace them to their earliest publication in order to obtain information as to the native country of the plants to which they belong and other particulars relating to them. The task is, however, by no means an easy one, as the notices have to be sought in numerous and widely-scattered horticultural periodicals.

To obviate this difficulty a list of new garden plants was published in the *Gardeners' Year Book and Almanack* as long ago as 1860, and this list was continued annually until the *Year Book and Almanack* of 1886, which contained the new plants of 1885. The new plants of 1886 to October were published by instalments in the columns of the *Journal of Horticulture* during the months of January to May, 1887. The publication was not continued in the following year, and it was believed that it was no longer likely to be undertaken by private enterprise. Such an annual list was, however, found to be so indispensable, even for the work of Kew itself, that it was decided to undertake its compilation by the Kew Staff. Accordingly the list for 1887 was published in the *Kew Bulletin* for 1888. It was accompanied by the following prefatory remark :—

"As the publication of a list of new garden plants is of the "greatest interest to botanical establishments everywhere, and as

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"such a list would give information respecting many new plants "grown at Kew, and distributed, in course of exchanges, to "correspondents in all parts of the world, it has been determined "to continue the list as one of the regular issues of the *Kew* "*Bulletin*. It is believed that such a publication will be of "service to the horticultural world generally."

This expectation has been amply fulfilled, and the publication of the lists has been continued annually. From 1890 this has been done in the form of an appendix to the *Bulletin*. Several correspondents at Kew have found it convenient to cut up the lists and post up their contents in the form of a continuous alphabetical catalogue. It is obvious that, for the purpose of running down a name, a search through a long series of annual lists becomes increasingly tedious. It was therefore felt that it would be a boon to others besides Kew to combine the lists for, at any rate, a considerable period in one volume.

The Kew Library contains copies of the lists published in the *Gardeners' Year Book* for the years 1862 to 1878 and 1880 to 1886. Every effort has been made to obtain a copy of that for 1879, but without success. The only one known to exist (apart from public libraries) is that in the possession of the proprietors of the *Journal of Horticulture*, and this has been most obligingly lent to Kew for transcription.

The new plants of 1876 to 1885 were catalogued for the *Gardeners' Year Book* by Mr. N. E. Brown, A.L.S., an Assistant in the Herbarium of the Royal Botanic Gardens—as unofficial work. He proceeded on a definite plan which has been continued since. It was therefore considered advisable in preparing the present list to start with the new plants of 1876.

The lists published in the *Kew Bulletin* are now prepared as routine work by the Staff.

In addition to species and well-marked varieties, hybrids, whether introduced or of garden origin, have been included where they have been described with formal botanical names. Mere cultural forms of well-known garden plants are omitted for obvious reasons.

In every case the plant is cited under its published name. These are largely provisional and often wildly incorrect. When

first introduced into cultivation the merit of many new garden plants depends solely on their foliage. Their true botanical affinities cannot be ascertained till they flower, and in some cases many years may elapse before this takes place. A striking instance is afforded by *Talisia Princeps*, now known to belong to Sapindaceæ ; it had previously passed in gardens under the names of *Theophrasta pinnata* (Myrsinaceæ) and *Brownea Princeps* and *B. erecta* (Leguminosæ).

Where definite botanical determinations are possible, or synonymous names exist, these are given in square brackets. Only names are cited which agree in form, at any rate, with the usual Latin binominal nomenclature. The personal authority for such names has, however, been uniformly omitted, as it was found in too many cases impossible to assign it with certainty.

The reference given is to the publication in which the plant is first described or figured ; to this is added, when available, a reference which supplies further information. The natural order is given in the case of the first species cited of each genus. This is followed by abbreviations intended to indicate the appropriate cultural conditions. A brief notice of the habit and most striking points of each plant is given ; but it has not been considered necessary to attempt botanical descriptions. But a description of hybrids of garden origin and of mere garden varieties is not given, as otherwise the list would exceed the limits within which it is necessary to confine it. The native country is added at the end.

The total number of plants catalogued for the 21 years, which is covered, amounts to 7,600. The majority of the actually new plants included have been derived from the United States of Colombia, the Malayan Region, and the Polynesian Islands, all areas known to be rich in species and still imperfectly explored botanically.

The orders most largely represented are all Monocotyledonous ; they are *Orchidaceæ*, *Liliaceæ*, and *Araceæ*. This is, however, only significant as representing the present drift of horticultural taste. The two first are especially popular in the British Isles for the sake of their flowers, and the latter on the Continent for their foliage.

The genera most largely represented are the following :—

Odontoglossum	...	...	about	350 entries.
Cypripedium	...	...	„	350 „
Cattleya ...	...	...	„	250 „
Dendrobium	...	...	„	220 „
Lælia	...	...	„	160 „
Masdevallia ...	...	...	„	150 „
Oncidium ...	...	...	„	120 „
Croton, Iris ...	...	...	„	100 „ each.

With regard to *Odontoglossum* a great number of forms and even of species previously undescribed have been introduced from the high Andes. Our knowledge of the genus has been, in fact, about doubled during the period covered by the list. None of the forms enumerated in the list have originated in cultivation.

The art of the gardener has added to botanical science the knowledge of a considerable number of bigeneric hybrids, *i.e.*, of crosses between species belonging to distinct and even not very closely allied genera. It was at one time supposed that such crosses were either impossible, or, if possible, were a proof that the genera were not really distinct. Darwin had long, however, clearly shown that the limitations and possibilities of cross-fertilisation do not run parallel with taxonomic affinities, *i.e.*, with the place occupied by the parents in a natural classification. It may be convenient to give the following list of bigeneric hybrids included in the list :—

Aloe × Gasteria.
Aphelandra × Stenandrium.
Bertolonia × Sonerila.
Calanthe × Limatodes.
Chionodoxa × Scilla.
Epilælia = Epidendrum × Lælia.
Epiphronitis = Epidendrum × Sophronitis.
Gloxinia × Tapeinotes.
Lælio-cattleya = Lælia × Cattleya.
Phaio-calanthe = Phaius × Calanthe.
Sophro-cattleya = Sophronitis × Cattleya.
Sophro-lælia = Sophronitis × Lælia.
Spiræa × Astilbe.
Urceocharis = Urceolina × Eucharis.
Zygocolax = Zygopetalum × Lycaste.

An even more remarkable phenomenon is presented by the at present unique case of a trigeneric hybrid :—*Sophro-cattleya Veitchii*, a garden hybrid between *Lælio-cattleya elegans* and *Sophronitis grandiflora*.

The number of names enumerated under *Croton* largely represents mere forms cultivated for the beauty of their foliage of *Codiæum variegatum*, formerly known as *Croton pictus*. In point of fact the two genera are widely distinct, and belong to two different groups of Euphorbiaceæ.

The publications from which the list has been compiled, with the abbreviations used to indicate them, are as follows :—

Acta Hort. Petrop.—Acta Horti Petropolitani.
American Florist.
B. H.—La Belgique Horticole.
B. M.—Botanical Magazine.
B. T. O.—Bulletino della Società Toscana di Orticoltura.
Bull Cat.—W. Bull, Catalogue of New, Beautiful and Rare Plants.
Bull. Mus. Paris.—Bulletin du Muséum d'Histoire Naturelle, Paris.
Cat. Comp. Cont. d'Hort.—Catalogue de la Compagnie Continentale d'Horticulture.
Cat. Nat. Arb. Zösch.—Catalogue des National-Arboretums zu Zöschen.
Damm. Cat.—Dammann, General Price List and Catalogue of Bulbs.
Engros-Cat. des Nat. Arb. Zösch.—Engros-Catalogue des National-Arboretums zu Zöschen.
Fl. and P.—Florist and Pomologist.
Fl. des S.—Flore des Serres.
F. M.—Floral Magazine.
G. and F.—Garden and Forest.
Gard.—The Garden.
Gard. World.—Gardening World.
Garten-Zeitung.
G. C.—Gardeners' Chronicle.
Gfl.—Gartenflora.
G. M.—Gardeners' Magazine.
H. G.—Hamburger Garten- und Blumenzeitung.
Icones Plantarum,—Hooker's Icones Plantarum,

Ill. H.—L'Illustration Horticole.
Jard.—Le Jardin.
J. H. F.—Journal de la Société Nationale d'Horticulture de France.
J. O.—Journal des Orchidées.
J. of H.—Journal of Horticulture.
Journ. Bot.—The Journal of Botany.
Journ. de Bot.—Journal de Botanique.
Journ. Linn. Soc.—Journal of the Linnean Society.
J. R. H. S.—Journal of the Royal Horticultural Society.
K. B.—Kew Bulletin.
L.—Lindenia.
Lemoine Cat.—Lemoine, Catalogue et Prix-courant.
L'Hort. Int. Cat.—L'Horticulture Internationale, Catalogue.
Lind. Cat.—Linden, Catalogue des Plantes.
M. D. G.—Mitteilungen der Deutschen Dendrologischen Gesellschaft.
M. G. Z.—Möller's Deutsche Garten-Zeitung.
M. K.—Monatschrift für Kakteenkunde.
Nat. Arb. Zösch.—Neuheiten-Offerte des Nationale-Arboretums zu Zöschen.
N. B.—Notizblatt der Königl. Botanischen Gartens und Museums zu Berlin.
N. G. M.—Dr. Neubert's Garten-Magazin.
O.—L'Orchidophile.
Oester. Bot. Zeitschrift.—Oesterreichische botanische Zeitschrift.
O. R.—Orchid Review.
Proc. R. H. S.—Proceedings of the Royal Horticultural Society.
R.—Reichenbachia.
Regel, Descr.—Regel, Descriptiones Plantarum.
R. H.—Revue Horticole.
R. H. B.—Revue de l'Horticulture Belge.
Sand. Cat.—Sander's Catalogues.
Späth Cat.—Späth's General Nursery Catalogue.
Veitch Cat.—Veitch's Catalogue of Plants.
Veitch. Man.—Veitch's Manual of Orchidaceous Plants (*Cattl.*—Cattleya and Lælia; *Cypr.*—Cypripedium; *Dendr.*—Dendrobium; *Masdev.*—Masdevallia).
Ver. Zool.-Bot. Ges. Wien.—Verhandlungen der Kaiserlich-Königlichen Zoologisch-botanischen Gesellschaft in Wien.

Vilmorin Cat.—Catalogues de Vilmorin-Andrieux et Cie.
Warner Orchid. Plants. — Warner, Select Orchidaceous Plants.
W. G.—Wiener Illustrirte Garten-Zeitung.
Williams' Cat.—Williams' Descriptive Catalogue.
W. O. A.—Warner and Williams' Orchid Album.
W. O. Gr. Man.—Warner and Williams' Greenhouse Manual.
Year-book.—Hogg's Gardeners' Year Book.

Other abbreviations used are :—

diam.—diameter.
f., ff.—figure, figures.
fl.—flower or flowers.
fr.—fruit.
ft.—foot or feet.
G.—Greenhouse.
H.—Hardy.
herb.—herbaceous.
H. H.—Half-hardy:
in.—inch or inches.
infl.—inflorescence.
l.—leaf or leaves.
per.—perennial.
pet.—petal or petals.
pl.—plate or plates.
S.—Stove.
sep.—sepal or sepals.
ser.—series.
shr.—shrub.
syn.—synonym.
t., tt.—plate, plates.
var.—variety or varieties.

It only remains to add, that the present list has no pretensions to be more than a compilation. As an Index to the horticultural literature of recent years, it is believed that it will be found of practical utility. To have attempted to further elaborate it or to give it anything approaching a scientific character would have postponed its publication indefinitely.

No doubt, its use will detect some errors. For example, by some mischance the genus *Sonerila* has got out of place. But those who in using the book discover its defects will probably be those who will regard them most leniently.

W. T. THISELTON-DYER.

January, 1900.

NEW GARDEN PLANTS.

1876 to 1896.

Abelia rupestris grandiflora. (*R. H.* 1886, 488.) Caprifoliaceæ. H. Garden variety.

Abelia spathulata. (*B. M.* t. 6601.) H. A free-flowering shr. with opposite, lanceolate, acute, toothed l., and pairs of shortly pedunculate white fl. Corolla ¾ in. long, campanulate, contracted at base into a slender tube. Calyx-lobes four or five, oblong-spathulate, obtuse. Japan.

Abies brachyphylla. (*R. H.* 1879, 180; *B. M.* t. 7114.) Coniferæ. H. Tree, having the facies of *A. nordmanniana*. Young shoots bluish-glaucous. L. 1–1¼ in. long; apex rounded, truncate, or shortly bifid, dark green above, glaucous on each side of midrib below. Japan.

Abies Eichleri. (*Fl. and P.* 1882, 36.) H. A silver fir like *A. nordmanniana*, but distinguished by its cones being bluish-black instead of green when in the young state, and by the whiter under surface of its l. and blue-green colour of its shoots. Japan. [*A. Veitchii*, Lindl.]

Abies excelsa mutabilis. (*W. G.* 1888, 107.) H. Garden variety of *Picea excelsa*.

Abies grandis pendula. (*M. D. G.* 1896, 28.) H. A weeping form, of garden origin.

Abies Mariesii. (*G. C.* 1879, xii. 788-9, f. 129.) H. A silver fir, having the aspect of *P. nordmanniana*. Japan.

Abies nordmanniana horizontalis. (*R. H.* 1887, 151.) H. Garden variety.

—— Var. **pendula.** (*R. H.* 1890, 440, f. 132.) H. Garden variety with drooping branches.

Abies sachalinensis. (*G. C.* 1879, xii. 589, f. 97.) H. A tall pyramidal tree, with long linear l. and handsome cones. Japan.

Abroma sinuosa. (*Bull Cat.* 1884, 11). Sterculiaceæ. S. A shr. of slender habit, with broadly ovate, pedately-pinnatifid l., on slender petioles. Madagascar.

Abronia latifolia. (*B. M.* t. 6546; *G. C.* 1881. xvi. 364, f. 70.) Nyctaginaceæ. H. An interesting late-summer-flowering herb, everywhere covered with viscid glandular hairs. Stems prostrate. L. petiolate, elliptic-ovate, obtuse. Fl. yellow, in axillary, pedunculate, semiglobose umbels. Western North America.

Abutilon chrysostephanum compactum. (*W. G.* 1888. 123.) G. Malvaceæ. Garden variety.

Abutilon floribundum. (*R. H.* 1881, 350, t.) G. shr. of dwarf bushy habit, bearing numerous fl. Fl. of a bright red, striate with orange, with dark red veins. Garden origin.

Abutilon Lemoinei. (*F. M.* t. 287.) G. Shr. with somewhat palmatifid l. and large nodding yellow fl.

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Abutilon Thompsoni, flore pleno. (*B. H.* 1885, 324, t.) G. This is merely a double-flowered form of the variegated var. of *A. striatum*.

Acacia baileyana. (*G. C.* 1894, xv. 37, f. 4.) Leguminosæ. G. A shr. with elegant bipinnate l. and small globose heads of yellow fl. in loose unbranched racemes. Australia.

Acacia spadicigera. (*B. M.* t. 7395.) S. One of the Bull's-horn Acacias which forms a woody shr., with large bipinnate l. and large horn-like spines in pairs. The fl. are in axillary clusters on cylindrical heads, 1 in. long. Central America and Cuba.

Acacia viscidula. (*Gfl.* t. 1109.) G. Shr. of lax habit, with linear phyllodia, and axillary globular heads of yellow fl. Australia.

Acæna adscendens. (*B. T. O.* 1888, 331.) Rosaceæ. H. Rock-work plant, with long creeping stems, giving off ascending branches. L. pinnate, leaflets ¼ to 1 in. long, obovate or elliptic-obovate, obtuse, toothed, glabrous above, silky beneath. Fl. heads globose, dark purple, on long peduncles. Patagonia.

Acæna ovina. (*B. T. O.* 1888, 332.) H. Similar to *A. ovalifolia*, but a little larger and less graceful. The leaflets of the rather long pinnate l. are elliptic, obtuse, and pinnately cut to the middle, more or less pubescent on both sides, or glabrous above. Fl. in long interrupted spikes, purple. Australia.

Acæna sarmentosa. (*B. T. O.* 1888, 332.) H. per. A rampant species similar to *A. Sanguisorbæ*, but stouter, with longer branches, and the l. more silky beneath, and with longer hairs. Fl. in globose heads on tomentose peduncles of moderate length with one or two bracts. Tristan d'Acunha.

Acæna sericea. (*B. T. O.* 1888, p. 332.) H. per. with rather long l., having but 3 to 5 pairs of cuneate, oblong, toothed leaflets, silky beneath. Fl. green in globose heads, on long peduncles, which also bear 2 or 3 smaller heads, sessile in the axils of leafy bracts. Patagonia, Chili.

Acæna splendens. (*B. T. O.* 1888, 332.) H. A stout tufted alpine species. L. pinnate, with 3–4 pairs of obovate or oblanceolate, toothed leaflets, densely silky-white on both sides. Fl. in long interrupted spikes on long stout peduncles. Chili.

Acalypha hamiltoniana. (*Bruant Cat.* 1895.) Euphorbiaceæ. G. or S. L. green, teeth prominently rounded, yellow.

Acalypha macafeeana. (*Veitch Cat.* 25.) S. shr. of erect habit. L. broad, spreading, obcordate in form, serrate, frequently much cut, 8 in. long, 6 in. broad, bright red, blotched with deep crimson.

Acalypha macrophylla. (*Ill. H.* 1887, t. 275.) S. foliage shr. L. stalked, 3–4 in. long, cordate-acuminate, serrate, blackish-green, irregularly mottled with crimson.

Acalypha musaica. (*Williams' Cat.*, 1877, 17.) S. shr., with large deeply-serrated l. of a bronzy-green, richly variegated with various shades of orange and coppery-red. South Sea Islands.

Acalypha obovata. (*Bull Cat.* 1884, 11.) S. foliage plant. L. obovate, green with creamy edges when young, changing to olive-green with pink margins, and finally to a bronzy centre with broad rosy-crimson margins. Polynesia.

Acalypha Sanderi. (*G. C.* 1896, xx. 392.) S. Attaining a height of 10 to 15 ft., with large ovate green serrated l. and long drooping tail-like spikes of bright rose-red fl. [*A. hispida*, Burm.] New Guinea.

Acalypha torta. (*Bull Cat.*, 1876.) S. Shr. of curious habit. Stems erect, covered with suborbicular flabellate very much contorted l., of a dark olive green, on semiterete petioles. Samoa.

Acalypha triumphans. (*Ill. H.* 1888, 55, t. 55; *L'Hort-Int. Cat.* 1888-9, 41; *H. G.* 1888, 502; *W. G.* 1888, 384.) S. A foliage plant, with large cordate, toothed, acute l., variegated with deep crimson, green and brown. [Seems to be a variety of *A. wilkesiana*.] Solomon Isles.

Acampe madagascariensis. (*G. C.* 1891, x. 608.) Orchidaceæ. S. Allied to *A. papillosum*. It has thick leathery l. and small whitish fl., the lip rose-purple. Madagascar.

Acanthomintha ilicifolia. (*B. M.* t. 6750.) Labiatæ. H. A pretty little annual, with small, elliptic-spathulate, toothed l., and whorls of light purple fl. Bracts elliptic, with spiny margins; upper lip of corolla narrow, erect; lower lip broad and 4-lobed, flattish. California.

Acanthophippium Curtisii. (*G. C.* 1881, xv. 169.) Orchidaceæ. S. epiphyte in the way of *A. bicolor*. Fl. light-rose with numerous purple spots; lip white and purple, with the nail and keel yellow. Borneo?

Acanthophippium eburneum. (*G. C.* 1896, xx. 266.) S. Near *A. Curtisii*. Pseudobulbs, angular, 2 to 3 in. long, purplish; l. oblong-lanceolate, plicate, 8 in. long, 2 in. wide; scape two flowered; fl. nearly 2 in. long, white. Malaya?

Acanthophippium mantinianum. (*J. O.* 1896, 138; *L.* xii. t. 536.) S. A near ally of *A. bicolor*, but differing in its much more robust habit and in the colour of the fl. Sep. yellow slightly shaded with green, spotted and blotched with purple: pet. like sep. but lower portion whiter; lip waxy-white, thickened part of disk orange-yellow with ridges spotted and lined with purple. Philippines.

Acanthophœnix grandis. (*Ill. H.* 1895, 185.) Palmæ. S. A handsome palm with finely cut l. and deep brown spines. [Also called *Calamus grandis* and stated to be a native of Borneo (*Ill. H.* 1895, 223). *Acanthophœnix* is peculiar to the Mascarene Islands]. Brazil.

Acanthorhiza aculeata. (*Ill. H.* 1879, t. 367.) Palmæ. S. A fine palm, with the trunk covered with ascending branching spines. L. with an orbicular outline cut into many linear acute spreading segments. It has been distributed under the name of *Chamærops stauracantha*. Mexico.

Acanthus Caroli-Alexandri. (*Gfl.* 1886, 626-635, f. 73-75.) Acanthaceæ. H. per., with a lax rosette of a few lanceolate, pinnatifid, spinose toothed radical l., growing to about 16 in. long by 3-4 in. broad, and a stem 9-18 in. high, with 2-4 similar l., and ending in a dense spike of white fl., often suffused with rose. Greece.

Acer campestre postelense. (*M. D. G.* 1896, 80.) Sapindaceæ. H. A yellow-leaved form of the common maple.

Acer colchicum tricolor. (*R. H.* 1886, 371.) H. tree. A form with variegated foliage. The young l. are of a bright violaceous red, shot with rose pink, shading off here and there in an irregular manner into all shades of dark red or crimson to creamy white. Garden variety.

Acer dasycarpum. (*R. H.* 1896, 398.) H. Some ornamental garden forms of this species are described at the above place.

Acer dasycarpum pulverulentum. (*R. H. B.* 1889, 268.) H. tree. A form of the Silver Maple, in which the l. are spotted with white, and the tips of the young shoots tinted with red.

Acer Duretti aureo-marginatum. (*M. D. G.* 1896, 79.) H. A form with l. margined and dotted with yellow.

Acer Ginnala. (*M. D. G.* 1896, 79.) H. The two following varieties of this species are described by Count Schwerin; the names are descriptive enough:—*angustilobum*, *pulverulentum*.

Acer Heldreichii. (*Gfl.* t. 1185.) H. Tree, with small palmately 5-lobed l., the lobes dentate-acute, the middle one cuneately tapering to its base. Fl. in small terminal panicles, smaller than the leaves. Greece.

Acer insigne. (*B. M.* t. 6697; *Fl. and P.* 1883, 107.) H. tree, one of the hardiest in cultivation: with large bright red bud scales, palmately deeply-lobed and serrate, pale green l., and terminal panicles of greenish fl. Persia.

Acer Miyabei. (*Späth Cat.* 1894–5. *G. and F.* 1893, 143, t.) H. Nearly related to the Norway Maple, *Acer platanoides*. Japan.

Acer Negundo varieties. (*M. D. G.* 1896, 78.) H. The following forms of this species are described and figured, viz.:—*densiflorum*, *falcatum*, *koehneanum*, *parallelum*, *rectangulatum*.

— Var. **boreale.** (*M. D. G.* 1896, 2.) H. Said to have been introduced from Canada and to be hardy in Russia, and to ripen seeds where the form usually grown in Europe is killed by cold.

Acer Negundo, foliis marginatis aureis. (*R. H. B.* 1889. 268.) H. tree. A form with l. bordered with golden yellow, as constant as the silver variegated var., but of more vigorous growth.

—— Var. **Guichardi.** (*R. H. B.* 1889, 268.) H. tree. A form with the l. all yellow, like those of the Golden Elder; growth fairly vigorous.

—— Var. **odessanum.** (*M. D. G.* 1896, 2.) H. A form with l. of a deeper golden colour and retaining that colour longer than the ordinary golden *Acer Negundo*.

—— Var. **pendulum.** (*Jard.* 1895, 128.) H. A weeping form of the common Box-elder.

Acer palmatum Aokii. (*Gfl.* 1892, 33, t.) H. tree. A form with variegated foliage. Garden variety.

—— Var. **dissectum roseo-pictum.** (*Gfl.* 1886, 569.) H. tree. Garden variety.

Acer platanoides compactum. (*Gfl.* 1886, 117.) H. tree. An ornamental var., producing a round compact head, something like the Ball *Acacia*. Garden variety.

—— Vars. **columnare, dilaceratum, euchlorum, integrifolium, nanum** (syn. *pygmæum* of gardens), and **quadricolor,** of gardens (*H. G.* 1888, 337–40). Garden varieties.

—— Var. **columnare.** (*R. H.* 1878, 346.) H. tree. A remarkable variety with a straight trunk, the branches being reduced to short branchlets 2–4 in. long, which are densely crowded and very leafy, hiding the stem, and forming, as it were, a leafy column, having a very singular effect. Garden variety.

—— Var. **integrilobum.** (*Gfl.* 1887, 431, ff.) H. tree. Garden variety.

—— Var. **multicolor.** (*Gfl.* 1886, 219.) H. A form of the Norway Maple with large red l. later showing yellowish-white specks and blotches.

—— Var. **undulatum.** (*R. H.* 1887, 63.) H. tree. Garden variety.

Acer Pseudo-platanus euchlorum. (*R. H.* 1879, 270.) H. tree. A var. with large dark green l. Garden variety.

—— Var. **variegatum.** (*R. H.* 1877, 334.) H. shr. or tree, the l. being deep purple, beautifully variegated with yellowish-white and rose-coloured flakes and stripes. Other garden forms in *R. H.* 1896, 398.

Acer Trautvetteri erythrocarpa. (*Cat. Nat. Arb. Zösch.* 1892, 11.) H. tree. A variety with red fruit. Caucasus.

Acer Van-Volxemii. (*G. C.* 1877, vii. 72. f.) H. tree, somewhat resembling *A. Pseudo-platanus*, but the l. are more oblong in outline, with shallower oblong-lanceolate lobes, and very acute sinuses between them, margins coarsely toothed; thin in texture, light green above, silvery and quite glabrous beneath. Caucasus.

Achillea rupestris. (*B. M.* t. 6905; *R. H.* 1887, 166.) Compositæ. H. per. An alpine plant of dwarf tufted habit, with rosettes of linear-spathulate, obtuse, pubescent, entire greyish-green l., and sparsely leafy stems, 4–6 in. high, with small corymbs of small white fl.-heads, with very broad ray florets. South Italy.

Achyranthes Comestii. (*R. H.* 1879, 240.) Amarantaceæ. G. A sport of *A. Verschaffeltii*, of a dark violet-red, often striped with black. *Iresine Herbstii*, Hook.]

Acidanthera æquinoctialis. (*G. C.* 1893, xiv. 682; *G. and F.* vi. 133, 515.) Iridaceæ. G. A remarkable species with stems 4 ft. high, and ensiform l. 20 in. long by 1½ in. wide. Fl. in a loose spike, each with a tube 6 in. long and a limb 3 in. across, white with a crimson eye. This plant was known to Dean Herbert, but it has only lately been introduced. Mountains of Sierra Leone.

Acineta hrubyana. (*G. C.* 1882, xviii. 102.) Orchidaceæ. S. Distinguished by the narrow erect side partition of the lip. Fl. white with a few purple spots inside the lip. Colombia.

Acineta sulcata. (*G. C.* 1879, xi. 652.) S. epiphyte, allied to *A. Humboldtii*. Fl. probably yellow; lip curved, with strongly developed wings on the hinder side of the side partitions, and adnate

to a greater part of them ; callus linear-ligulate sulcate, with two teeth in front, and two larger and two smaller ones on the base ; apex of column hairy. Colombia (*l*).

Acineta Wrightii. (*Gard. World*, 1889, v. 673 ; *L.* iv. 88.) S. A robust species, with ovate pseudobulbs marked on their faces with two grooves, and bearing 2–4 coriaceous, lanceolate, acute l. Fl.-stem 2–3 ft. long, with numerous handsome fl. Sep. and the smaller pet. yellowish, dotted with purple. Lip. 3-lobed, the lateral lobes whitish, the terminal lobe purple, with a white border, pubescent in the middle, crest oblong, brown-purple, pubescent with purple hairs. [This is *Lucæna spectabilis*, Reichb. f.] Mexico.

Aciphylla Lyallii. (*W. G.* 1889, 123.) Umbelliferæ. H. per. New Zealand.

Acmena ovata. (*Bull Cat* 1882, 13.) Myrtaceæ. G. A neat evergreen shr., with the stems and petioles of the opposite ovate l. dark purplish-brown ; young foliage purplish-red.

Aconitum dissectum. (*Gfl.* 1886, 226, f.) Ranunculaceæ. H. per. Much in the way of *A. Napellus*, but more hairy, and differing principally in the narrower helmet of the fl. Himalaya.

Aconitum Fischeri. (*B. M.* t. 7130.) H. Nearly allied to the Chinese *A. Fortunei*, differing chiefly by its longer not semicircular hood, and more robust habit. [Syn. *A. californicum*, Hort.] North-east Asia, Japan, and North America.

Acokanthera spectabilis. (*B. M.* t. 6359.) Apocynaceæ. An older name for *Toxicophlæa spectabilis*.

Acriopsis indica. (*G. C.* 1881, xv., 656.) Orchidaceæ. S. Epiphyte with clusters of short shining pseudobulbs, bearing linear-lanceolate l., and loose panicles of light ochre fl., with a few light-brown markings on the petals. India.

Acrochæne Rimanni. (*G. C.* 1882, xvii. 796.) Orchidaceæ. S. A curious and distinct orchid, with fl. of a fine lilac-purple with a dark purple lip. Sep. oblong lanceolate : the lateral ones connate, bidentate. Pet. short, oblong, toothed ; lip with semicircular denticulate side lobes, and a fleshy triangular middle lobe. Tropical Asia.

Acropera Loddigesii atropurpurea. (*Gfl.* 1890, 507.) Orchidaceæ. S. Variety with dark purple sep., and deep yellow pet. and lip, dotted with black.

Acrostichum magnum. (*G. C.* 1883, xx. 135.) Filices. S. fern. A large species with tufted stipes, those of the barren fronds 3–4 in. long, clothed with adpressed scales, lamina 2–3 ft. long 1½–2 in. broad, narrowed to apex and base, membranous, green, with numerous scales on both sides, those on the upper whitish and inconspicuous, on the lower ferruginous. British Guiana.

Actinidia Kolomikta. (*G. C.* 1880, xiv. 589, f.) Ternstrœmiaceæ. H. A semi-scandent shr., with ovate acute l. 3–4 in. long, having a silvery blotch near the apex. Fl. ½ in. in diam., white. Peduncles covered with fluffy white down. Japan.

Ada Lehmanni. (*G. C.* 1891, x. 34.) Orchidaceæ. G. Habit of *A. aurantiaca*, but more rigid. Sep. and pet. orange, lip white with a yellow callus. Colombia.

Adenocarpus decorticans. (*B. H.* 1883, 156, t.) Leguminosæ. H. A shr., having the general aspect of the furze, with densely set 2-3-foliolate l., the leaflets linear, soft, dark green ; fl. in short compact racemes, like those of the pea, bright yellow. Spain.

Adesmia balsamica. (*B. M.* t. 6921.) Leguminosæ. G. A floriferous, much branched shr. ; branches slender. L. small pinnate. Fl. in lax racemes, bright golden yellow, about ½ in. in diameter. Pod 1 in. long, with 6–8 rounded joints. Chili.

Adiantum æmulum. (*G. C.* 1878, 584.) Filices. S. Fern. much in the way of *A. cuneatum*, but less drooping, and of a bluer-green colour ; the pinnules are obliquely cuneate-oblong, with 2–5 sori on each ; stipes and rachides glabrous and black. Brazil.

Adiantum aneitense. (*Bull Cat.* 1881, 8, 15.) S. An evergreen fern of free growth. Fronds bipinnate : pinnæ 3–4 on each side of the stipes, distant, linear lanceolate acute ; pinnules obliquely oblong, lobed along the upper edge. Aneityum, Melanesia.

Adiantum assimile cristatum. (*Bull Cat.* 9.) G. A form with crested fronds. Victoria.

Adiantum Bausei. (*G. C.* 1880, xii. 456. f. 70, and 465, f. 73.) S. A hybrid between *A. trapeziforme* and *A. decorum*.

Adiantum bellum. (*G. C.* 1879, xi. 172, f.; *Bull Cat.* 1879, 3.) S. Maidenhair fern, forming pretty neat dwarf green tufts, about 6 in. high. Fronds ovate lanceolate, very slender, bipinnate, pinnules small, cuneate, irregular in form, on hair-like black stalks. Allied to *A. fragile*, but the pinnules are not deciduous as in that species. Bermuda.

Adiantum bessonianum. (*G. C.* 1896, xx. 75; *G. and F.* 1896, 314.) S. A variety of *A. tenerum* with crowded imbricated reniform pinnæ. West Indies.

Adiantum Birkenheadii. (*G. C.* 1886, xxv. 648.) S. Fern of tufted habit, with tripinnate fronds about 2½ ft. long and 1 ft. broad, deltoid acuminate; pinnæ alternate, distant, and long-stalked near the base, closer together and sessile near the apex, the lower ones bipinnate, the upper ones pinnate; pinnules obtusely oblong-trapezoid, cut on the upper edge into shallow lobes. Garden seedling.

Adiantum Bournei. (*Fl. and P.* 1882, 105.) G. Maidenhair fern, remarkable for its dense triangular fronds on long stipites.

Adiantum Burnii. (*G. C.* 1887, 1, 447.) S. Garden variety.

Adiantum Capillus-veneris digitatum. (*G. C.* 1887, 1, 547). G. Garden variety.

—— Var. **grande.** (*G. C.* 1886, xxvi. 103.) G. A garden variety of larger size, denser, and more bushy in habit than the type.

—— Var. **imbricatum.** (*G. C.* 1887, i. 547.) G. Garden variety.

Adiantum Clæsii. (*Ill. H.* 1894, 137, t.; *G. C.* 1894, xv. 663.) S. Species with large obcordate-lanceolate pinnules variegated with white and light green on dark green ground. Brazil.

Adiantum Collisii. (*Veitch Cat.* 1885, 9.) S. A Maidenhair Fern with slender, black stipes, 12–18 in. long, and a noble triangular frond 15–21 in. across; pinnules small rhomboid, truncate on the inner and lower sides, and slightly toothed on the outer and upper margins. Garden variety.

Adiantum colpodes roseum. (*G. and F.* 1888, i. 376.) S. fern. A var. having the young fronds of a coppery-red hue.

Adiantum cuneatum deflexum. (*G. C.* 1884, xx. 716; *Veitch Cat.* 1884, 5. 11.) S. Var. with triangular 3–4-pinnate fronds and deflexed, lobate pinnules: lobes crenate-dentate. Garden hybrid between *A. cuneatum* and *A. Bausei*.

—— Var. **dissectum.** (*G. C.* 1879, xii. 84.) G. or S. A form growing to 1 ft. high, with the pinnules more deeply lobed than in the type.

—— Var. **elegans.** (*G. C.* 1885, xxiv. 134.) S. A garden variety, with dark, glossy stipes, 6 in. long, and a triangular frond about 9 in. long and broad. Pinnæ ovate-triangular, with rather distantly set pinnules, which are about ¼ in. long and ⅛ in. broad, wedge-shaped.

—— Var. **Gordoni.** (*W. G.* 1888, 107.) S. Garden variety.

—— Var. **grandiceps.** (*G. C.* 1882, xvi. 685.) S. fern. A var. with the apices of the pinnæ developed into bushy tasselled heads. Garden variety.

—— Var. **strictum.** (*G. C.* 1884, xx. 526.) S. A dwarf variety, with erect, quadripinnate fronds, having ascending somewhat spirally arranged pinnæ. Garden variety.

Adiantum cyclosorum. (*G. C.* 1887, i. 547.) S. A deciduous species. Fronds 1½–2 ft. long, triangular, tripinnate, glabrous: pinnæ spreading ovate, stalked; pinnules rather large, 5–9 lines long, rhomboid, bearing 8–10 large, circular, marginal, sori. Ecuador.

Adiantum Daddsii. (*G. C.* 1887, i. 42.) G. Garden variety.

Adiantum dolabriforme. (*Williams' Cat.* 1883, 25, t. 17.) S. evergreen fern, with slender graceful pinnate, proliferous fronds; the pinnules small, distant, dolabriform, crenate.

Adiantum dolabriforme. (*Fl. and P.* 1882, 105.) S. fern, often confounded with *A. lunulatum*, but differing in its evergreen habit. Fronds elongated, pinnate, proliferous; pinnules dolabriform. Brazil.

Adiantum Edgeworthii. (*Ill. H.* 1878, t. 286.) S. fern. Fronds linear, slender, often proliferous, pinnate; pinnæ sessile, broadly cuneiform, truncate, toothed, about ¼ in. long and broad. India.

Adiantum elegans. (*G. C.* 1886, xxv. 200; *Williams' Cat.* 1886, 22.) S. evergreen Maidenhair fern, with triangular ovate quadri-pinnate fronds. The long-stalked distant pinnæ are ovate or deltoid, with stalked pinnules; pinnulets very small, 2- to 3-lobed, roundish, the larger ones slightly trapezoid, the terminal ones shortly cuneate. The stipes blackish purple. Garden variety.

Adiantum elegantissimum. (*G. C.* 1892. xii. 249.) S. A sport from *A. cuneatum*.

Adiantum Fergusoni. (*G. C.* 1884. xxii. 360.) S. fern of rather singular appearance, with triangular-ovate, tripinnate, stiffly erect fronds. Pinnæ on long stalks, spreading: the pinnules variable in size and form, generally large, bluntly ovate, truncate at the base, bipinnatifid, on slender pedicels ½–⅝ in. long. Ceylon.

Adiantum festum. (*G. C.* 1887, i. 110.) G. Garden variety.

Adiantum fluviatile multifidum. (*G. C.* 1879, xii. 84.) G. A form, with the apex of the fronds multifidly lobate, otherwise as in type. New Zealand.

Adiantum fragrantissimum. (*G. C.* 1887, i. 447, and ii. 198–9, f. 49.) S. Garden variety.

Adiantum hians. (*G. C.* 1887, i. 41.) S. Maidenhair fern, with triangular-ovate tripinnate fronds having black stipes. Pinnules variable, roundish, balloon-shaped transversely oblong, or rhomboidal, the end rounded, bearing 1–2 large, broadly-gaping sori. New Caledonia.

Adiantum lambertianum. (*W. G.* 1890, 345.) S. A var. of *A. cuneatum*, having the very small ultimate segments much crumpled and curled.

Adiantum Lathomi. (*G. C.* 1882. xvi. 685.) S. fern, in the way of *A. Ghiesbreghtii*, but with a drooping habit. Fronds 2–3 ft. high, somewhat pentagonal in outline. Stipes stout, smooth, Pinnæ, pinnules and pinnulets all stalked. The larger pinnules 1–1¼ in. long, trapeziform, lobed on the margin. Garden variety.

Adiantum Legrandii. (*Fl. and P.* 1882, 105.) S. A dwarf fern, with small triangular fronds densely set with overlapping pinnules. Garden variety.

Adiantum lineatum. (*Ill. H.* 1895, 185. 312, t. 44.) S. A variegated Maidenhair nearly resembling *A. Claesii*. Brazil.

Adiantum lunulatum celebicum. (*Ill. H.* 1878, t. 329.) S. fern. A distinct var. with densely pinnate fronds; the pinnules more or less falcate below, with a few broadly rounded lobes; the petioles sub-basilar, but not median. [*A. celebense*, Lind. Cat. 1879.] Celebes.

Adiantum macrophyllum albostriatum. (*G. C.* 1892, xi. 816.) S. A var. with the pinnæ streaked with creamy white on a green ground.

—— Var. **bipinnatum.** (*Williams' Cat.* 1885, 7.) S. A var., differing from the type in having the fronds twice pinnate in the lower part, and with smaller pinnules. Jamaica.

Adiantum Mairisii. (*G. C.* 1885, xxiv. 294.) G. Fern with triangular quadripinnate fronds, having ovate pinnæ on rather long stalks: pinnules cuneate-trapezoid, with an irregular truncate apex, those near the end of the pinnæ larger, with a lobate margin; the fertile ones cut into oblong concave sinuses, giving a bluntly cornute aspect to the pinnules. [Garden variety of *A. Capillus-veneris*.]

Adiantum manicatum. (*Gard.* 1890, xxxviii. 94.) S. A seedling with bold broad fronds and much divided pinnules.

Adiantum monochlamys. (*Veitch Cat.* 1886, 9.) G. A Maidenhair fern with glossy, dark brown stipes, and spreading, ovate-deltoid tripinnate fronds, with small close-set pinnules, pea-green above, silvery beneath, the fertile ones with a single sorus in a notch in the upper edge. Japan.

Adiantum mundulum. (*G. C.* 1879, xii. 84.) S. A dwarf evergreen fern, about 6 in. high, with deltoid tripinnate fronds, with numerous, small, crowded, narrow cuneate, 3-lobed pinnules. A seedling of *A. cuneatum*.

Adiantum nebulosum. (*G. C.* 1893, xiii. 415.) S. A seedling form of *A. gracillimum*.

Adiantum neoguineense. (*G. C.* 1877, vii. 12.) S. Fern. Fronds spreading, glabrous, deltoid, 3–4 times pinnate, pellucid membranous, dark olive-green with a glaucous tinge; pinnæ ovate; pinnules on hair-like stalks, the terminal one cuneate, the lateral ones trapezoid, ½-inch long, crenate; sori 6–8 to a pinnule, small, orbicular, entirely sunk in the closed sinuses; indusium smooth, stipes dark brown. New Guinea.

Adiantum Novæ-caledoniæ. (*G. C.* 1883, xix. 720.) S. Maidenhair fern. Stipes and rhachis blackish, the latter with dark brown hair-scales on the upper side. Fronds subpentagonal in outline, tripinnate at the basal part, bipinnate above; pinnæ narrow lanceolate, the larger ones caudate, pinnules irregular in size and form, coarsely toothed. New Caledonia.

Adiantum obliquum minus. (*Bull Cat.* 1883, 11.) S. Evergreen fern of dwarf creeping habit, with pinnate fronds having a black stipes, pinnæ falcate, acuminate, the sterile ones inciso-dentate, the fertile ones with close-set oblong sori; apical pinnæ trapeziform and lobed. Colombia.

Adiantum Oweni. (*G. C.* 1887, i. 110.) G. Garden variety.

Adiantum Pacottii. (*Fl. and P.* 1882, 105.) S. A Maidenhair fern, 4–6 in. high, with elongate triangular, tripinnate fronds, with densely set pinnæ and pinnules; pinnules broadly cuneate and deeply cleft. [*A. cuneatum*, var.]

Adiantum palmatum. (*G. C.* 1877, vii. 40, f. 5; *Williams' Cat.* 1877, 10, 17.) S. A species, allied to *A. speciosum*. Fronds scrambling, elongate, narrowed to apex, laxly tripinnate: pinnules stalked, varying from obovate-cuneate to semi-orbicular, 1–1¾ in. broad, palmately cleft half-way down, sori oblong, situate on the tips of the segments: stipes and rhachis smooth, dark brown. Peru.

Adiantum Paradiseæ. (*G. C.* 1889, vi. 558.) G. A species, with the habit of *A. æthiopicum*. Fronds 6 in. broad and long, pinnæ petioled: ultimate segments crenate at the apex. South Africa.

Adiantum peruvianum. (*Ill. H.* 1878, t. 331.) S. A species, with pinnate fronds. Rhachis black, slender; pinnules unequally ovate-acuminate, base cuneate, 2–3½ in. long, 2–3 in. broad, deep green; sori marginal, on the upper part of the pinnules. Peru.

Adiantum Reginæ. (*Veitch Cat.* 1888; *W. G.* 1888, 127.) S. A Maidenhair fern, approaching *A. Victoriæ* and *A. rhodophyllum*, with the habit of *A. scutum*.

Adiantum rhodophyllum. (*G. C.* 1884, xxi. 372; *Fl. and P.* 1884, 58; *Veitch Cat.* 1884, xi. f. 5.) S. A fern with triangular tripinnate fronds and slender black stipites and rhachides, nearly 1 ft. long: pinnules rhombo-trapezoid, deeply lobed, the lobes often toothed. The young fronds changing from rose to green. Garden variety.

Adiantum rhomboideum. (*G. C.* 1879, xii. 84.) This is the correct name for the plant commonly cultivated as *A. rarium*. The true *A. rarium* has the sori continuous, but in *A. rhomboideum* they are distinct. Jamaica.

Adiantum schizophyllum. (*L'Hort. Int. Cat.* 1888–9, 45.) Garden variety of *A. æmulum*.

Adiantum tetraphyllum gracile. (*Bull Cat.* 1878, f. ix.; *Fl. and P.* 138.) S. fern, remarkable for its reddish young fronds. Stipes black, slender. Fronds bipinnate; pinnæ 4–6, linear-lanceolate acuminate, 6–8 in. long; pinnules obliquely oblong, truncate at base, margin crenate-dentate. Colombia.

—— Var. **obtusum.** (*Ill. H.* 1889, 65, t. 86.) S. Fern, with bipinnate fronds, 8–10 in. high. Stipes brown: pinnæ 4–6: pinnules trapezoid, obtuse. Congo.

Adiantum versaillense. (*G. and F.* 1888, i. 376.) A crested form of *A. Capillus-veneris*.

Adiantum Victoriæ. (*G. C.* 1882, xvii. 425; *Fl. and P.* 1882, 74.) S. A fern of dwarf densely tufted habit. Fronds ovate, bipinnate, usually with 1 pair of compound pinnæ and 4–5 simple ones. Pinnules large, bluntly deltoid from a truncate base, or subrhomboidal, deeply lobed. Sterile lobes serrate. Sori oblong or reniform at the apex of the lobes. Garden variety. *A. tenerum*.

Adiantum Waltoni. (G. C. 1887, i. 111.) G. Garden variety.

Adiantum Weigandii. (*G. C.* 1884, xx. 748; *Fl. and P.* 1884, 9.) S. fern, with triangular, tripinnate, glaucous fronds: pinnæ stalked, ovate, the basal pair oblong-triangular; pinnules stalked, the lower ones distant, pinnatifid with lobate segments: upper pinnules crowded. Stipes and its branchlets black, shining. American garden variety.

Adiantum Williamsii. (*G. C.* 1878, x. 45, f. 4.) G. fern, something in the way of *A. chilense*. Stipes dark brown, golden at base. Fronds tripinnate, membranous, bright green, semi orbicular, with oblong-reniform marginal sori. Peruvian Andes.

Adonis amurensis. (*G. C.* 1896, xix. 240.) Ranunculaceæ. H. A pretty plant with much divided l. and yellow fl. about 2 in. in diameter. Mandshuria.

Adonis vernalis major. (*G. C.* 1879, xi. 620, f. 89.) H. Dwarfer and with larger fl. than the type.

Æchmea Barleei. (*G. C.* 1883, xx. 102.) Bromeliaceæ. S. A large plant, with a rosette of 8–9 lorate-ensiform green l., 2–3 ft. long and 2 in. broad, thinly white lepidote, and prickly on the margin. Fl.-stem central, paniculately branched, the bracts on the lower part red, on the upper part green. Fl. distichous, calyx with a globose mealy tube, corolla pale yellow. British Honduras.

Æchmea brasiliensis. (*Gfl.* t. 1202.) S. A fine Bromeliad, with a lax rosette of narrow, ascending, and spreading l., 2 to 3 ft. long, spiny on the margins, bright green, slightly mealy beneath. Fl.-stem about 3 ft. high, bright red as well as the bracts and calyces of the blue fl. which are disposed in a dense spike-like panicle. Brazil.

Æchmea Cornui. (*Ill. H.* 1885, 36, t.) S. A dwarf robust species with broad ligulate l., truncate and mucronate at the apex, toothed at the margins, green, spotted with brown towards the base and apex. Infl. rather shorter than the l. The scape red, with sparse white tomentum. Bracts and calyx carmine red. Corolla yellow. Brazil.

Æchmea drakeana. (*B. H.* 1888, 401; *Gfl.* 1888, 650; *W. G.* 1888, 432.) S. A plant, with a rosette of about 12, spreading-recurved l., 1½ ft. or more long, 2–2½ in. broad, channelled down the face; apex obtuse, mucronate; margins with short straight distant spines, green, tinted with violet beneath; both sides finely lepidote. Fl.-stem 1½ ft. high, violet at the base, red above, and covered with a white tomentum, and furnished with pale narrow bracts. Spike oblong, lax. Fl. sessile: calyx glabrous, bright rose; corolla 1½ in. long, bright blue. Ecuador.

Æchmea flexuosa. (*G. C.* 1887, i. 8.) S. One of the largest of the genus, with a rosette of 20–30 large horny l., 3 in. broad, bright green spotted with white; prickles small and pale. Fl.-stem about 3 ft. high; panicle lax, ovate, with zigzag ultimate branchlets. Fl. distant, sessile glabrous: calyx and ovary pale pink: pet. bright red. [Now identified with *E. spectabilis*, Brongn.]

Æchmea Fuerstenbergi. (*B. H.* 1879, 42, t. 2.) S. A species, with linear acuminate l., 1½ ft. long, spinulose on the margins, green. Panicle large, dense, sessile cone- or spike-like, with closely imbricating bright rose-coloured spinulose bracts, each with a short very mealy flowering branch in its axil: fl. distichous, about 9 on each branch, with rose-coloured bracteoles. Bahia, Brazil.

Æchmea Glaziovii. (*B. H.* 1881, 100: *B. H.* 1880, 240.) S. A pretty little species, one of the smallest of the genus, with a rosette of about 40 lorate channelled arched coriaceous l., with minute distant spines on the margins. Scape short. Fl.-spike dense, ovate. Floral bracts cuspidate, rosy: fl. purplish. Rio de Janeiro.

Æchmea Hystrix. (*B. H.* 1880, 91.) S. With numerous spreading rigid channelled acuminate spinescent l., 2–3 ft. long, greyish beneath. Scape nearly as long as the l., covered with smooth unarmed scarlet bracts. Fl. violet, arranged in a dense oval spike. Cayenne.

Æchmea Lalindei. (*Ill. H.* 1882, t. 181: *Fl. and P.* 1883, 57.) S. A plant with long broad concave acute denticulate green l., 3–4 ft. long, and a tall fl.-stem, the upper part with large

reflexed acute crimson bracts: fl.-spike dense: calyces ellipsoidal, green with pink apices; corolla not exserted. Colombia.

Æchmea macracantha Pellieri. (*Ill. H.* 1880, 59.) S. L. 2½ ft. long, channelled, grey-green; margins armed with long straight spines. The outer l. are spreading and recurved, the inner ones erect. Fl.-stem 3–4 ft. high, branched above. The floral bracts are carmine, becoming tinted with vermilion. Fl. inconspicuous, yellowish-white.

Æchmea mexicana. (*G. C.* 1897, i. 8.) S. A species, with a dense rosette of 20–30 l., 2 ft. or more long, 3 in. broad, with a deltoid-cuspidate tip, pale green spotted with darker green; prickles small. Fl.-stem 2 ft. high, densely mealy; panicle oblong-cylindrical, 4–5 in. broad. Calyx and ovary green, densely mealy; pet. bright crimson. Mexico.

Æchmea myriophylla. (*B. M.* t. 6939; *G. C.* 1887, ii. 108.) S. A distinct-looking species with a dense rosette of narrow attenuate channelled l., 2–2½ ft. long, 1 in. broad, armed with close brown prickles on the margins, dull green, sprinkled with silvery scales on the back. Fl.-stem 1½ ft. high, panicled above, and as well as the bracts and calyces bright red. Fl. distichous, pink fading to lilac. Tropical America.

Æchmea paniculata. (*R. H.* 1880, 245.) S. Two ft. high, with broad arching l., 4 ft. or more long, with spinous margins. Fl.-stem with 12–15 bractiform l. Panicle 4–6 in. long, 3–4 in. broad. Bracts woolly, white, each subtending 2 sessile fl., between which arises a short peduncle bearing 4–5 other fl. Sep. scarious, brown. Pet. light rosy-purple. Mexico.

Æchmea paniculigera. (*Bull Cat.* 1882, 13; *Fl. and P.* 1882, 74.) S. Plant with ligulate l., and a reddish-purple fl.-stem several ft. high, clothed with white down, paniculately branched above. The branches, bracts, and calyces rose-coloured; pet. deep purple. West Indies.

Æchmea purpurea. (*Williams' Cat.* 1889, 22.) S. L. 12–18 in. long, pale green at the tips, purplish-green towards the base, and assuming in the summer time a crimson-purple hue. Colombia.

Æchmea Veitchii. (*B. M.* t. 6329; *Bull Cat.* 1878, 3, f. x.) S. evergreen herb. L. in a large lax rosette, 12–15 in. long, 2 in. broad, linear-lanceolate acuminate, serrate, green above, whitish beneath. Fl. in a large dense oblong spike, subtended by squarrose toothed bracts; fl. and bracts scarlet-red. Colombia.

—— Var. **superba.** (*R. H.* 1880, 450 t.) S. Var. with dark red bracts, which retain their colour for a long time.

Æchmea Weilbachii leodiensis. (*R. H.* 1887, 31). S. A var. with a rosette of about 40 l. armed on the basal half with more crowded and larger spines than in the type, upper surface dark olive and bright green, beneath with the basal part washed with violet-brown and spotted with blood-red. Fl.-stem shorter than the l. Bracts scarlet, mixed with violet and green. Fl. smaller than in the type. Brazil.

Aeranthus brachycentron. (*Act. Hort. Petrop.* 1890, xi. 303.) Orchidaceæ. S. A dwarf species with oblong-ligulate l., 6–8 in. long, unequally bilobed at the apex. Scape slender, twice as long as the l., bearing 1–2 pale yellow fl. Sep. with long slender points. Lip cordate-ovate, cuspidate, with a short clavate incurved spur. [Distributed by Sander & Co. as *A. grandidieranus.*] Comoro Islands?

Aeranthus curnowianus. (*G. C.* 1883, xix. 306.) S. A distinct plant, having a dwarf leafy stem, with ligulate emarginate fleshy dull green rather rough l., and yellowish-white fl. Sep. and pet. ligulate acute: lip cuneate-obovate, retuse, with a median apiculus; spur filiform, five times as long as the lip. Madagascar.

Aeranthus grandidierianus. (*G.* 1888, 200; *H. G.* 1888, 127.) [A synonym of *Angræcum grandidieri-anum*, Carr.]

Aeranthus Leonii. (*G. C.* 1885, xxiii. 726; xxiv. 80, f. 17, 18.) S. L. numerous sword-like, stout, falcate, 8–9 in. long. Fl. ivory white, comparable to those of *Angræcum sesquipedale*, but with a much shorter spur, which is funnel-shaped at its base, then filiform and bent abruptly upwards. Comoro Islands.

Aeranthus ophioplectron. (*G. C.* 1888, iv. 91; *H. G.* 1888, 398.) [*Angræcum ophioplectron*, Reichb. f.]

Aeranthus trichoplectron. (*G. C.* 1888, iii. 264; *H. G.* 1888, 226; *O.* 1888, 161.) S. L. soft, linear, contracted at the bidentate apex, 5 in. long, ⅛ in. broad. Fl. solitary, axillary, white, including the filiform spur nearly 5 in. long. Sep. lanceolate, acute. Pet. linear-acuminate. Lip broad, concave at base, acuminate at apex. Madagascar.

Aerides augustianum. (*G. C.* 1890, vii. 9; *L.* v. 39, t. 210; *Gfl.* 1890, 256.) Orchidaceæ. S. Allied to *A. Rothschildii*, Reichb. f., but differs in its longer spur and in having rose-coloured fl., instead of greenish white. Philippine Islands.

Aerides ballantinianum. (*G. C.* 1885, xxiv. 198.) S. A showy species, with rather short bilobed l. and variable fl. Dorsal sep. and pet. somewhat toothed; lateral sep. white, with a purple eye-blotch at the top. Lip with the side-lobes equal to or shorter than the mid-lobe, which is toothed at the sides and bidentate at the top; white with the side-lobes orange or self-coloured, or marked with purple streaks and transverse bars.

Aerides bernhardianum. (*G. C.* 1886 xxiv. 650.) S. A very distinct and fine species. The raceme has the appearance of *A. quinquevulnerum*; the l. is narrow, strap-shaped, unequally bilobed; the lip has the side-lobes overlapping each other, and the front lobe covering both in front. Borneo.

Aerides Burbidgei splendens. (*G. C.* 1885, xxiii. 756.) S. Fl. rich purple, having the side-lobes of the lip ochre, spotted with brown, and the tip of the spur ochre.

Aerides crassifolium. (*G. C.* 1877, vii. 590.) S. epiphyte with warm purplish-coloured fl. in the way of *A. falcatum*, but with the following distinctions:—spur bent at an angle, side lobes of lip much broader and shorter. The two keels on the disk of the lip stand close together at the base, they then get contiguous, and finally diverge, arching on both sides. Burma.

Aerides Emericii. (*G. C.* 1883, xviii. 586.) S. A species with a rich raceme of delicate mauve-purple fl., the middle of the sep. and pet. and the tip of the lip being of a much deeper tint than the rest of the fl. The spur is subcylindric and is curved under the lip. Andaman Islands.

Aerides expansum. (*G. C.* 1882. xviii. 40.) S. A distinct species with an expanded lip, with large amethyst blotches on the side-lobes and on the lateral parts of the middle lobe, the median area deep purple. Burma. A variety of it (var. *Leonie*), which has the side lobes of the lips blunt retuse, or even dolabriform, is described at the place above indicated. [It has been called *A falcatum*, var. *expansum G.C.* 1881, xvi. 38.]

Aerides falcatum compactum. (*G. C.* 1888, iii. 744; *H. G.* 1888, 370.) S. A compact form, with very thick stems, short broad l., and short infl.

Aerides Fieldingi album. (*L.* xii. t. 538.) S. A form differing from the type in having entirely white fl.

Aerides formosum. (*Fl. and P.* 1882, 105.) S. A form with pendent racemes of white spotted fl., the trifid lip being coloured with amethyst. Garden hybrid.

Aerides godefroyanum. (*G. C.* 1886, xxv. 814.) S. A fine species with fl. comparable to those of *A. maculosum*; they are rosy-white, streaked and spotted with amethyst on the sep. and pet., and the whole disk of the lip rich amethyst. Lip triangular, with a retrorse hooked solid tooth and a very small angular spur. Cochin China.

Aerides illustre. (*G. C.* 1882, xviii. 71; *Fl. and P.* 1882, 121.) S. A handsome plant, in the way of *A. maculosum*, but with an unbranched raceme and larger fl., white with a lilac hue and very few blotches; lip amethyst-purple with longitudinal marks at the base.

Aerides Jansoni. (*G. C.* 1890, viii. 66; *O.* 1890, 193.) S. A supposed natural hybrid between *A. odoratum* and *A. expansum*. Burma.

Aerides Lawrenciæ. (*G. C.* 1884, xx. 460; *Fl. and P.* 1883, 169.) S. In the way of *A. odoratum*, but finer. Sep. at first greenish, then white, afterwards yellowish; pet. flushed

at the tips with purple ; mid-lobe of of lip purple, sending two purple lines to the mouth of the green-tipped spur. Burma (?)

Aerides Lawrenciæ amesianum. (*G. C.* 1891, x. 393.) S. A var. with flower-stalks more than 2 ft. long crowded with richly coloured fl. larger than those of the type.

Aerides lawrencianum. (*Fl. and P.* 1882, 121.) S. A species with linear l. and drooping spikes of large white fl. with a convex scoop-shaped lip of a bright magenta-rose.

Aerides lepidum. (*G. C.* 1883, xix. 466.) S. A pretty species, with a rich raceme of white fl. tipped with purple. Andaman Islands.

Aerides maculatum formosum. (*L.* i. t. 11.) S. A fine form with large and numerous fl., sep. and pet. white marked with numerous rose-purple spots. Lip white at base, marked on the crests and auricles with rose-purple lines, the large elliptic front lobe entirely rose-purple.

Aerides marginatum (*G. C.* 1885, xxiii., 533.) S. A beautiful species in the way of *A. quinquevulnerum*. Sep. and pet. light yellow, with the front border purple. Lip with rounded deep orange side-lobes, toothed in front, and a ligulate toothed middle lobe, yellow, changing to brown. Spur conical, light green.

Aerides odoratum birmanicum. (*G. C.* 1887, ii. 272.) S. A small-flowered var. with a light purple line at the tips only of the lateral sep., and the mid-lobe of the lip very narrow and purple. Burma.

—— Var. **Demidoffi.** (*L.* i. t. 14.) S. Spike of large white fl., having the tips of the sep., pet., and lip marked with purple ; the spur is dotted with purple and tipped with green.

Aerides ortgiesianum. (*G. C.* 1885, xxiii. 501.) S. This resembles *A. quinquevulnerum*, but is smaller. Sep. and pet. white, blotched with purple. Lip white, with sulphur-coloured side-lobes, and a green spur, all spotted with red.

Aerides pachyphyllum. (*G. C.* 1880, xiv. 231.) S. epiphyte, with a large infl. of several fl. of a light crimson-lake colour. Spur and column white : the small lobes of the lip painted with more or less warm purple. Burma.

Aerides picotianum. (*G. C.* 1888, iv. 378.) S. At the place quoted this plant is stated by Reichenbach to be the same as *A. houlletianum*, Reichb. f.

Aerides platychilum. (*R. B.* 1893, 64.) S. A species allied to *A. houlletianum*. L. 6 in. long, over an inch wide ; scape 5 in. long ; fl. an inch across, lip flat, spur reflexed, sep. and pet. light buff ; lip yellow and purple.

Aerides quinquevulnerum purpuratum. (*G. C.* 1881, xvi. 230.) S. A distinct variety, much spotted with purple, and having the side-lobes of the lip washed with purple.

—— Var. **schadenbergianum.** (*Gfl.* 1886, 606.) S. A var. of more compact habit with shorter and broader l. than the type.

Aerides Reichenbachii cochinchinense. (*G. C.* 1881, xiv. 620.) S. No description is given of the plant. Cochin China.

Aerides Rœbelenii. (*G. C.* 1884, xxi. 510.) S. A fine species, having the growth of *A. quinquevulnerum*, with 4 5 erect peduncles reaching 1 ft. in length, bearing many fragrant fl. ; sep. and pet. pale green with white tips ; lip with rosy hue and yellow lobes. Philippines.

Aerides rohanianum. (*G. C.* 1884, xxi. 206.) S. With long l., and long dense racemes. Sep. white or rose, or rose-mauve, with a white border. Lip white with purple lines and blotches, central lobe nearly rhomboid, bilobed at apex, with some small crenulations ; spur bent forward, sulphur or orange-coloured, spotted with purple : the spur has two horns on the anterior side, which are somewhat hammer-like ; beneath them a keel runs downward. Eastern Asia.

Aerides sanderianum. (*G. C.* 1884, xxii. 134.) S. A fine species, with short, broad l., and numerous, very long, rich infl. Sep. and pet. white with purple tips ; lip yellow with a purple middle lobe, and the end of the spur green. East Tropical Asia.

Aerides savageanum. (*Veitch Man.* vii. 78.) S. A pretty species, with racemes of moderate sized fl., white, tipped and dotted with crimson-purple. Philippines.

Aerides suavissimum blandum. (*Gfl.* 1891, 576.) S. A variety without spots on the fl.

Aerides Veitchi. (*B. H.* 1881. 123, t. 8-9.) S. A beautiful species, with long strap-shaped unequally bilobed l., and rich panicled racemes of rosy fl, about ½ in. diam. Moulmein, Burma.

Aerides virens Ellisii. (*W. O. A.* ii. t. 298.) S. A strong-growing form with longer racemes than in the type, being 18-20 in. long. Sep. and pet. white with amethyst tips. Lip white, with the side-lobes and base of the spur spotted with amethyst, the middle lobe rich amethyst, and the tips of the spur greenish. Java.

Æschynanthus Hildebrandii. (*B.M.* t. 7365.) Gesneriaceæ. G. A well marked species, the stems being short, the l. less than 1 in. long, ovate, thick, fleshy, and the fl., in erect clusters on the ends of the stems, 1 in. long, orange scarlet, the segments margined with deep red. Burma.

Æschynanthus obconica. (*B. M.* t. 7336.) S. A near ally of *Æ. tricolor*, but with a broad campanulate calyx and short corolla-tube. It has slender stems, ovate l., and two-flowered axillary racemes: calyx 1 in. wide, crimson: corolla scarlet with yellow stripes on the spreading lobes. Malaya.

Æsculus chinensis. (*F. G.* 1889, 152.) Sapindaceæ. H. tree. A horse-chestnut with the divisions of the l. distinctly stalked, oblong-oblanceolate, finely serrate, and a panicle of rather small fl. China.

Æsculus plantierensis. (*R. H.* 1894. 246.) H. A garden hybrid between *Æ. Hippocastanum* and *Æ. rubicunda*.

Æsculus rubicunda Briotii. (*R. H.* 1878, 370.) H. tree. A fine variety of this species, with deep red fl. Garden origin.

Æsculus turbinata. (*R. H.* 1888, 120–124, 496. *G. and F.* 1888, i. 491.) H. tree, resembling *Æ. Hippocastanum* in general appearance, but distinguishable at sight by the l. being pale greyish beneath. Fl. white. Fr. globose-turbinate, without spines. Seeds about 2 in each fr., with a very large hilum. Cultivated under the name of *Æ. chinensis*. Japan.

Aethionema coridifolium. (*Gfl.* t. 1150.) Cruciferæ. H. biennial. A dwarf crucifer of branched habit, with linear-spathulate l., and short, dense racemes of pretty purple fl. Lebanon.

Afzelia africana. (*Gfl.* 1886, 551.) Leguminosæ. S. per. An ornamental plant, with bluish-green pinnate l., and dense racemes of white fl. The seeds are about the size of a small bean of a shining blackish brown, with a coral-red area around the hilum. Tropical Africa.

Agalma vitiensis. (*Gfl.* 1887, 71. *Ipalima* by a misprint.) Araliaceæ. S. shr. with digitate l., the leaflets obovate-oblong, obtuse, narrowed into the petiole, entire, with horizontally spreading veins. Umbels 3–7 flowered. Fiji.

Aganisia cærulea. (*G. C.* 1876. vi. 226.) Orchidaceæ. S. epiphyte, with a slender climbing stem, articulate, and bearing distichous pseudobulbs, each with one cuneate oblong, acuminate l. Peduncle from the axil of sheath, dark green, few-flowered. Fl. blue with darker blue blotches, lip saccate and fimbriate. Brazil.

Aganisia cyanea. (*G. C.* 1889, iv. 492.) [Syn. *Warrea cyanea*, Lindl. *Bot. Reg.* 1845, t. 28: but not *Aganisia cyanea*, Reichb. f.]

Aganisia cyanea. (*G. C.* 1886. xxv. 720, erroneously printed *A. cærulea* corrected on p. 804 to the above.) S. A fine handsome orchid of distinct character, with creeping stems, and large pear-shaped one-leaved pseudobulbs. Peduncle arising from the base of the bulb, 2–3-flowered. Fl. about 2 in. in diam.; sep. and pet. light blue outside, yellowish and light blue inside. Lip brown with a dull orange callus, behind which is a pouch in the stalk of the lip: the blade of the lip is transversely reniform, with wavy margins. Rio Negro, Brazil.

Aganisia lepida. (*L.* ix. t. 400.) S. A well marked species first introduced in 1865, when it was described and figured by Reichenbach in his *Xenia Orchidacea*. It has erect grassy l. and tall many-flowered spikes of pure white handsome fl., each 1½ in. across. Brazil.

Aganisia oliveriana. (*G. C.* 1878, ix. 558.) S. epiphyte with beautiful

clear blue fl. Pseudobulbs depressed. fusiform. L. thin, cuneate-oblong-acuminate. Peduncle 2–4 flowered. Sep. and pet. oblong acute : lip with a long claw with two lateral teeth, the front part fimbriate, sky-blue with a yellowish-brown claw to the lip. Brazil.

Aganisia tricolor. (*L.* i. t. 45.) S. A fine orchid. much like *A. cyanea*, but the sep. are whitish on both sides, the pet. light blue, and the callus of the saddle-shaped orange-brown lip is different in shape. Amazons.

Agapanthus umbellatus excelsus. (*Bull Cat.* 1878, 154.) Liliaceæ. G. bulb. A very robust var. with fl. stems about 6 ft. high, and large umbels. of light blue fl. South Africa.

—— Var. **flore pleno.** (*Bull Cat.* 1878. 154.) G. bulb. A variety with blue double fl. South Africa.

—— Var. **Leichtlinii.** (*G.C.* 1879, x. 428.) G. With the habit of *A. minor*, but with shorter, broader l., and a denser umbel of larger fl. L. under a foot long, ¾ in. broad ; fl. 1¼ in. long, deep hyacinthine blue. South Africa.

Agapetes Mannii. (*G. C.* 1892, xii. 364.) Vacciniaceæ. G. A species with small crowded l., and small inconspicuous fl., similar to those of *A. obovata*. Khasia hills, India.

Agave Allibertii. (*G. C.* 1883, xix. 176 ; *Fl. and P.* 1883, 41.) Amaryllidaceæ. G. A remarkable bulbous species, with a rosette of 10–12 lanceolate, denticulate, subherbaceous l., which die down in winter. Fl. stem 4–5 ft. high : fl. single, about an inch long, greenish, arranged in a lax flexuose raceme. [Syn. *Hilbertia intermedia.*] Mexico.

Agave angustissima. (*G. and F.* 1893, vi. 5, f. 1.) G. A species belonging to the subgenus *Littæa* and allied to *A. filifera*. L. 12 to 20 in. long, ⅓ in. broad, flat on both sides, margins filiferous, apex pungent ; peduncle 12 ft. high, fl. in pairs, each 1½ in. long, very narrow, yellow, stamens purple. Mexico.

Agave Baxteri. (*G. C.* 1888, iii. 392 : *H. G.* 1888, 229.) G. L. about 30 in a dense sessile rosette, about 12 in. long, 3 in. broad, glaucous : spines ⅛–½ in. long, brown, hooked. Fl.-stem 8–10 ft. high : panicle lax, the branches 3–4 in. long, with a dense cluster of yellowish fl. Mexico ?

Agave Botterii. (*B. M.* t. 6248.) G. perennial, allied to *A. densiflora*. Stemless. L. 40–50 in a rosette, 2 ft. long, 6–8 in. broad, pale green and scarcely glaucous when mature, rigidly coriaceous, concave above, lanceolate, contracted towards base, gradually tapering above the middle to the dark brown channelled apical spine ; margin armed with close upturned teeth ⅛ in. long. Scape 5 ft. high, densely bracteate. Fl. greenish, in a dense spike. Mexico.

Agave bracteosa. (*G. C.* 1883, xviii. 776, f. 138–9.) G. A distinct species, with 10–15 linear l., 18–22 in. long, and 1½ in. broad at base, margins minutely serrulate. Fl.-stem 3 ft. high, the flowerless part densely covered with spreading or recurved bracts 5–6 in. long. Fl. in pairs forming a dense spike : perianth segments about ½ in. long ; ovary slightly longer : stamens about 2 in. long. Monterey, Mexico.

Agave fenzliana. (*B. M.* t. 6589.) This noble *Agave* is figured at the place quoted erroneously as *A. Hookeri*, which is a very different and much finer species. *A. fenzliana* has large drooping lanceolate acuminate pungent-pointed l., 3–4 ft. long, 3–5½ in. broad, of a rather light scarcely glaucous green. Marginal prickles small, 2–3 lines long, generally abruptly recurved, dark brown, easily detached from the leaf. Fl.-stem 20 ft. high ; infl. candelabriform ; fl. greenish. Mexico.

Agave Franzosini. (*K. B.* 1892, 3 ; *G. C.* 1892, xii. 179, f. 31.) G. A species of the dimensions and habit of *A. americana ;* l. intensely glaucous, forming a rosette 18 ft. across ; panicle candelabrum-like, 10 ft. high, fl. green and yellow.

Agave Henriquesii. (*G. C.* 1887, i. 732 ; ii. 307, f. 70.) G. succulent, intermediate between *A. xylonacantha* and *A. horrida*. Acaulescent. L. 2 ft. long, 5 in. broad, oblong-lanceolate, bright green, margined with a dark brown horny border, and armed with broad based prickles ¼ in. long. Fl.-stem 12–14 ft. high, the spike-like panicle occupying half of it. Ovary green, above 1 in. long, fl. with a very short tube, and lanceolate segments an inch long, tinged with brown. Mexico ?

Agave laxifolia. (*B. M.* t. 7477.) G. A species of the section *Rigidæ*

near *A. excelsa*. The fl. give out a smell exactly like that of mice. Mexico.

Agave maximowicziana. (*Gfl.* 1889, 183: *Act. Hort. Petrop.* 1890, xi. 303.) G. Allied to *A. densiflora*; with a dense rosette of subovate-lanceolate l., 3½ in. broad, densely and irregularly toothed, the terminal spine sometimes forked. Fl.-stem 6–7 ft. high, with a cylindric spike of sessile green fl. in pairs.

Agave Morrisii. (*G. C.* 1887, i. 543, 549. f. 105.) G. Allied to *A. americana*, but the l. are larger, 6–7 ft. long, and nearly 1 ft. broad, not glaucous, not so thick, and with smaller prickles. Fl.-stem 15–20 ft. high, with 30–50 candelabra-like branches. Fl. 2–2½ in. long, bright yellow. Jamaica.

Agave Nickelsi. (*R. H.* 1895, 579.) G. Described as a new species somewhat resembling *A. Victoriæ-reginæ*. Texas.

Agave oligophylla. (*G. C.* 1879, x. 492.) A new name for the plant described in *G. C.* 1878, ix. 266, as *A. paucifolia*, the name *paucifolia* having been previously used for another species.

Agave Parryi. (*G. C.* 1879, xii. 237, 39.) G. succulent. L. very numerous, 10 in. long, 3 in. broad, lanceolate acuminate, flat; margins spinose-dentate; terminal spine somewhat triangular, nearly flat or slightly keeled above. Fl. scape 8 ft. high, laxly bracteate: panicle like that of *A. americana*; fl. deep yellow-green. Stamens and style much exserted. Arizona.

Agave paucifolia. (*G. C.* 1878, ix. 266.) G. A pretty little plant, densely tufted and soboliferous. L. 6–8 to a rosette, 3–4 in. long, ½ in. broad at the middle, ¼ in. thick at base, broadly channelled down the face, slightly glaucescent, with about 10 horny brown prickles on each margin. [*A. oligophylla*, Baker.] Mexico.

Agave Shawii. (*Gfl.* t. 902, f, a-c.) G. A stemless tufted species, with numerous green erect sub-imbricating l., 8–10 in. long, 3½–4 broad, ovate-oblong, acuminate, ending in a strong spine, very concave; the margins brownish, armed with sub-contiguous stout curved or flexuose spines. Scape stout, 8–12 ft. high, entirely covered with triangular overlapping bracts, panicled above; branches of the panicle horizontal, ending in a large densely-packed head of yellowish-green fl. Fl. 3½ in. long. California.

Agave Terraccianoi. (*Gfl.* 1893, 66, f. 14.) G. Acaulescent, with a rosette of numerous narrow lanceolate l., about 1 ft. long and 2 in. broad, deep green specked with blood-red and without a continuous horny border. Infl. about 5 ft. high: fl. sessile, greenish-yellow in pairs or singly in the axils of bracts. Native country uncertain, probably Mexico or Texas.

Agave toneliana. (*G. C.* 1881, xv., 362.) G. L. 40–50 in a dense rosette, lanceolate, rigid, 1½–2 ft. long, 3–4 in. broad in the middle, where they are not more than about ⅛ in. thick, dull green, glaucous only when young; marginal prickles chestnut-brown, ⅛–½ in. long, confluent into a narrow brown border.

Agave Villarum. (*R. H.* 1886, 465.) G. Garden hybrid.

Agave wiesenbergensis. (*G. C.* 1885, xxiii., 206.) G. succulent. L. oblong-lanceolate, mucronate, remotely spine-toothed on the margin, 8 in. long, by 2 in. broad. Fl. spicate.

Ageratum Wendlandi. (*R. H.* 1885, 9.) Compositæ. H. A dwarf, compact species, with hairy stems, cordate l. of a dark green, and an abundance of blue fl. Mexico.

Aglaonema acutispathum. (*G. C.* 1885, xxiv. 39.) Araceæ. S. per. with erect smooth dark green stem, elliptic-ovate acuminate dark green l., 6–8 inches long, and ovate-lanceolate, acuminate, light green spathes, 3½ in. long. China.

Aglaonema angustifolium. (*K. B.* 1895, 18.) S. Distinguished by its long, narrow l., and silvery grey stem; spathe small, greenish-white. Straits Settlements.

Aglaonema costatum. (*G. C.* 1892, xi. 426.) S. A pretty stove foliage plant with ovate green l., spotted and veined with white; scape short; spathe small, green. Perak.

Aglaonema hookerianum. (*G. C.* 1882, xviii. 333.) S. Evergreen per. An unattractive species, with elliptic or elliptic-oblong dark green l., 6½–10 in. long, 2¾–4½ in. broad, a green boat-shaped spathe 2 in. long, and white spadix. Himalaya.

Aglaonema Lavalleei. (*Ill. H.* 1881, t. 418 ; *Lind. Cat.* 1881, 1.) S. A foliage plant, with petiolate, lanceolate acuminate l., 5–7 in. long, 1–2¼ in. broad, soft and pliable in texture, dark green, handsomely and very irregularly blotched with silvery grey. Sumatra, Borneo.

Aglaonema nebulosum. (*Ill. H.* 1887, 67, t. 24.) S. Much like *A. pictum*, having short broad sheaths to the petioles, and oblong or obovate-oblong l., obliquely and somewhat abruptly acuminate at apex, obtuse at the base, bright dark green irregularly blotched with whitish-green. Java.

Aglaonema pictum. (*Lind. Cat.* 1882, 2 ; *Ill. H.* 1882, t. 445.) S. A foliage plant with elliptic, elliptic ovate, or oblong-lanceolate, acuminate, dark green l., handsomely variegated with irregular whitish blotches. Spathe 1–1½ in. long, gibbous, white. Spadix protruding, white. Sumatra.

— Var. **compactum.** (*Bull. Cat.* 1888, 7 ; *L'Hort. Int. Cat.* 1888-9, 46.) S. Foliage plant of dwarf compact habit, with obliquely oblong-ovate acuminate dark green l. sparingly blotched with grey. Spathes pointed, shining, green. Java.

— Var. **gracile.** (*Bull. Cat.* 1882, 13.) S. A neat var. with a slender stem and narrower and more oblong l. than the type, otherwise similar. Borneo.

Aglaonema pumilum. (*Veitch. Cat.* 1894, 5, f.) S. A dwarf plant with ovate acuminate l. 5 in. long, coloured deep sea-green, marbled and blotched with white. Malaya.

Aglaonema rotundum. (*G. C.* 1893, xiv. 86 ; *J. of H.* xxvii. 379, f. 56.) S. A species, with short stems, roundish ovate l., 5 in. long, dark green, ringed with pink above, purple beneath. Spathe 2½ in. long, hooded, green. Malaya?

Aglaonema versicolor. (*G. C.* 1893, xiii. 114.) S. An ornamental-leaved plant, the ovate blades being coloured two shades of green and white in patches. Until this plant flowers its genus is uncertain. East Indies.

Agrostemma Walkeri. (*Gn.* 1890, 529.) Caryophyllaceæ. H. A garden hybrid between *A. Coronaria* and *A. Flos-joris*.

Ainsliæa aptera. (*Bull. Cat.* 1882, 13.) Compositæ. H. herbaceous per. Petioles wingless ; lamina cordate, sinuate-toothed. Fl.-heads discoid, purple, disposed in an elongate spike-like panicle. Sikkim.

Ainsliæa Walkeri. (*B. M.* t. 6225.) G. Herb. per., about 1 ft. high. Stem cylindric, rigid, erect, leafy below, laxly panicled above. L. erect and recurved, 3–4 in. long, narrow ligulate, attenuate towards the base, with a few sharp teeth near the bristle-pointed apex, dark green. Fl.-heads nearly sessile on the 1-2 in. long branches of the panicle, few together, narrow. Fl. about three, corolla white with five linear spreading lobes ; anthers purple red. Hong-Kong.

Akebia lobata. (*B. M.* t. 7485.) Berberidaceæ. H. This differs from *A. quinata* in having more woody branches, and trifoliate l. with broad lobulate very pale green more membranous leaflets ; the fl. too are smaller, though of the same structure and colour. Japan ; North China.

Alberta magna. (*Bull Cat.* 1891, 3 : *B. M.* t. 7454.) Rubiaceæ. G. or S. An ornamental shr. with deep green shining l., and panicles of tubular red fl., succeeded by winged fr. of a red colour, forming a conspicuous object. Natal.

Albuca Allenæ. (*G. C.* 1888, iii. 10 ; *H. G.* 1888, 125.) Liliaceæ. G. Allied to *A. Wakefieldii*. Bulb globose, 2 in. or more in diam. L. about 6, lanceolate, flaccid, glabrous, 1–1½ ft. long, 1½–2 in. broad. Fl.-stem. 3–4 ft. high. Raceme lax. Fl. about ¾ in. long, greenish-white, inner segments not connivent. Stamens sharply constricted above a quadrate base. Ovary trigonous ; style subulate, stigma capitate. Zanzibar.

Albuca Buchanani. (*G. C.* 1892, xii. 488.) G. A species nearly allied to *A. Wakefieldii*, with small ovoid bulbs, linear l., and a long thin scape bearing a raceme of yellow fl. Nyasaland.

Albuca corymbosa. (*G. C.* 1886, xxvi. 38.) G. Allied to *A. juncifolia*, with 6–8 terete l., 1 ft. or more long. Peduncle 6 in. long, with 5–6 fl. in a lax corymb ; perianth 1 in. long, yellow, banded with green ; inner segments hooded, connivent ; outer stamens without anthers. South Africa.

Albuca Elwesii. (*G. C.* 1880, xiv. 230.) S. [*A. Wakefieldii*, Baker.]

Albuca juncifolia. (*G. C.* 1876, v. 534.) G. bulb, bearing several terete erect bright green l., deeply channelled down the face 12–15 in. long, $\frac{1}{12}$–$\frac{1}{8}$ in. thick, slightly pubescent when young. Scape 1 ft. long, terete, glaucous, bearing a few-flowered raceme of yellow, drooping fl. The three outer stamens without anthers. South Africa.

Albuca Nelsoni. (*G. C.* 1880, xiv. 198. f. 41: *B. M.* t. 6649.) G. A fine plant, as beautiful as *Galtonia princeps*. L. 2–3 ft. long. Scape 4–5 ft. high: the upper half well furnished with large ascending white fl., with a dull red stripe down the back of each perianth segment. Natal.

Albuca trichophylla. (*G. C.* 1889, vi. 94.) G. A small species allied to *A. juncifolia*. It has small bright yellow fl., and slender pubescent subterete l. Natal.

Albuca Wakefieldii. (*B. M.* t. 6429.) S. bulb, with 4–5 broad linear attenuate, flaccid, glabrous l., 12–18 in. long, 1 in. broad, contemporary with fl. Fl. 10–15 in a lax raceme; perianth 1 in. long, dull green, with paler margins. East Tropical Africa.

Allamanda cathartica Hendersoni. (*Gfl.* 1887, 554, 560–1, f. 142.) Apocynaceæ. S. Garden variety. [Syn. *A. Hendersoni*.]

Allamanda magnifica. (*Williams' Cat.* 1888, 19.) S. A fine free-flowering climber, bearing clusters of clear yellow fl., with a deep orange-yellow throat, about 5 in. in diam. [A variety of *A. Schottii*.]

Allamanda violacea. (*G. C.* 1889, vi. 304: *B. M.* t. 7122.) S. A handsome climber, distinct from all other species in having rose-purple fl. It was in cultivation in 1861, but soon afterwards lost. Brazil.

Allamanda Williamsii. (*G. C.* 1891, x. 111; *G. and F.* 1891, iv. t. 376; *J. of H.* 1891, xxiii. f. 14; *Gard.* xl. 832.) S. A variety of *A. cathartica*. It differs from ordinary garden kinds in being of erect habit.

Allium Akaka. (*B. T. C.* 1894. 226.) Liliaceæ. H. A dwarf-growing species, with rose-coloured fl. produced in spring. [A near ally of *A. karatavience*, Regel.]

Allium alexianum. (*Regel, Descr.* 5.) H. Bulb globose; stem hollow; l. 2–3 or more, elliptic-oblong, or oblong-lanceolate 1–2 in. broad, glabrous; umbel many flowered, fl. whitish, striped with brownish-purple. Turkestan.

Allium amblyophyllum. (*Gfl.* t. 1190.) H. Rather a distinct species of dwarf habit, with small bulbs, and 5–6 broad linear obtuse flat l., spaced along the stem. Umbel about 1½ in. diam., globose; fl. lilac; perianth segments lanceolate, acute. Turkestan.

Allium ammophilum. (*Regel, Descr.* 5.) H. In the way of *A. senescens*, but with whitish-yellow fl. marked with reddish nerves, sweet-scented. Banat, Austria.

Allium anceps. (*B. M.* t. 6227.) H. L. 2, fleshy, falcate, 6–9 in. long, ½–¾ in. broad. Scape 2–4 in. high, flat with acute edges. Spathe of 2–3 deltoid concave membranous valves. Fl. 30–100 in a dense umbel, on short pedicels, bright purple. California.

Allium backhousianum. (*Gfl.* 213, 215. f.) H. A tall species, 3–4 ft. high, resembling *A. altissimum* and *A. giganteum*. Fl. in a dense globose head: perianth segments narrow linear and totally reflexed. Stamens united into a cup at the base. Himalaya.

Allium cabulicum. (*B. M.* t. 7294; *G. C.* 1893, xiii. 546.) H. Fl. in a dense globose many-flowered umbel; segments lanceolate, acute, whitish, with a keel of red-brown. A native of Affghanistan.

Allium cyaneum. (*Regel, Descr.* 6.) H. similar to *A. kansuense*, but the l. are all filiform-terete, not channelled: and the stamens are twice as long as the blue fl. [Syn. *A. cyaneum*, var. *macrostemon*, Regel.] Kansuh, North China.

Allium Erdelii. (*B. M.* t. 6426.) H. Bulb solitary, globose; l. 3–4, radical, 6–8 in. long, ½ in. broad, linear acuminate, glaucous, channelled down face, pubescent and ciliate at base. Scape 6 in. high, stout, terete, glaucous. Fl. in a dense umbel; perianth white, 1 in. in diam.; the segments with 1–2 teeth. Filaments purple at base. Ovary black. Palestine.

Allium elatum. (*Gfl.* 1887, 369, t. 1251.) H. with large, oblong, obtuse

l., 8–12 in. long, 2–4 in. broad. Scape stout 3 ft. or more high, with a large globose head of numerous purple fl., with spreading oblong obtuse segments. Central Asia.

Allium Fetisowi. (*Gfl.* t. 971, f.a f.) H. bulb, solitary, globose, with whitish membranous tunics. L. 2–3, linear, flat. Umbel bulbiferous, globose, densely many-flowered; perianth segments linear, very spreading or somewhat reflexed, rosy-lilac, as are also the stamens which have 1–2 lateral teeth near the base, and are shorter than the perianth. Turkestan.

Allium giganteum. (*Gfl.* t. 1113.) H. A striking species, with 6–7 flaccid glaucous l., 7–9 in. long, by 1½–2 in. broad, and a large globose umbel of pale rosy fl. on a stout scape 3 ft. high. Himalaya.

Allium Hierosolymæ. (*Damm. Cat.* 1889, 3.) H. Dwarf, about 8 in. high, with small round bulbs, curved hairy l., and umbels of white fl. Palestine.

Allium Holtzeri. (*Gfl.* t. 1169, f. a–c.) H. bulb. A small species, with slender cylindric bulbs, growing in dense tufts. L. filiform, nearly terete, as long as the scape, glabrous. Umbels 1 in. in diam., bearing bulbils among the fl. Fl. numerous, small, white; anthers orange-red. Turkestan.

Allium kansuense. (*Regel, Descr.* 6.) H. Bulbs slender, cylindric, tufted: stem leafy to near the middle. L. linear channelled in the lower part, margins rough. Umbel many-flowered, hemispherical: fl. blue, with the stamens shorter than the perianth segments. [Syn. *A. cyaneum*, var. *brachystemon*, Regel.] Kansuh, North China.

Allium karataviense. (*Gfl.* t. 941.) H. A fine species, with a large depressed-globose bulb, stout terete hollow stem, bearing 2–3 broad elliptic-oblong acute glaucous l., and a large globose many-flowered head of white starry fl. Turkestan.

Allium Macleanii. (*B. M.* t. 6707.) H. With 4–5 broad linear-lanceolate acute l., and a tall scape bearing a large umbel of mauve-purple fl., with green ovaries. Affghanistan.

Allium macranthum. (*B. M.* t. 6789.) H. Scarcely bulbous; l. numerous, broadly linear, 1–1½ ft. long, rather thin; scapes several, 2–3 ft. high; fl. numerous, bright mauve purple, in a large globose umbel; perianth segments connivent. Eastern Himalaya.

Allium orientale rubellum. (*Damm. Cat.* 1889, 3.) H. A pretty variety, with large, round, white-skinned bulbs, small glaucous l., and umbels of bright rosy flowers.

Allium ostrowskianum. (*Gfl.* t. 1089.) H. With 2–3 linear flat flaccid acute glaucous l., and a scape 8–12 in. high, with a many-flowered umbel of rose-coloured fl. Turkestan.

Allium oviflorum. (*Gfl.* t. 1134; *Fl. and P.* 1884. 9.) A hardy non-bulbous species, with distichous linear l., an angular scape, and a small umbel of long-pedicelled purple fl. Perianth ¼ in. long, ovoid, the segments being connivent.

Allium parciflorum. (*G. C.* 1888. iv. 236.) H., a small species, with an ovoid bulb, producing 1–3 slender stems, 4–10 in. high, bearing 2–4 slender filiform l., which are placed at from ⅓–½ way up the stem, and an umbel of 3–6 small purple fl. Corsica: Sardinia.

Allium przewalskianum. (*Regel, Descr.* 5.) H. bulb with terete rush-like l., and an umbel of rosy-lilac fl. Kansuh, China.

Allium Semenovi. (*Gfl.* t. 1156.) H. With glaucous, fistulose l., flat on the face, round on the back. Scape usually shorter than the l.; umbel small and dense, the yellow fl. having very short pedicels: outer segments of the perianth longer than the inner ones. Stamens very short, united in a tube round the ovary. Alatau Mountains, Central Asia.

Allium semiretschenskianum. (*Gfl.* t. 971, f. g.-k.) H. bulb, solitary, globose, with hyaline scariose tunics. Stem terete, with 3–4 linear canaliculate glaucescent l. Umbel many-flowered, semi-globose, bulbiferous. H. flesh-coloured; perianth segments lanceolate, much shorter than the stamens, suberect; inner stamens entire or with a tooth at the base. Turkestan.

Allium Sprengeri. (*Regel, Descr.* 7; *Damm. Cat.* 1889. 3.) H. allied to *A. flavescens*, with ovoid bulbs crowded on a short rhizome, flat linear l., and a many-flowered umbel of yellowish fl. Jaffa, Syria.

Allium stramineum. (*Gfl.* t. 886, f. 1.) H. Bulb solitary, whitish; stem 10–12 in. high, terete, bearing 3–4 fistulose l. below, shorter or as long as the stem: umbel globose, dense: spathe valves 2, shorter than the umbel. Fl. trigonous, straw-coloured; petals erect, their apices alone recurved. Mandshuria.

Allium unifolium. (*B. M.* t. 6320.) H. With small ovoid bulbs connected by a slender rhizome. L. 1–3, linear, shorter than the scape. Scape terete 1–2 ft. long. Umbel dense 20–30-flowered. Spathe valves as long as the pedicels. Flower rotate, mauve pink. California.

Allomorphia Griffithii. (*B. M.* t. 7324.) Melastomaceæ. S. A dwarf plant with large orbicular cordate leathery l., reddish beneath, bronze-green above, and axillary erect red scapes 8 in. long, bearing numerous small white fl. Malayan Peninsula.

Alloplectus Lynchei. (*B. M.* t. 7271.) Gesneraceæ. S. A species with fleshy stems, purplish, oblong-lanceolate, crenate l., and axillary clusters of tubular hairy yellow fl. with large calyces tinged with red. Colombia?

Alloplectus peltatus. (*B. M.* t. 6333.) S. shrub of dwarf habit, remarkable for one of each pair of l. remaining in a rudimentary state. Branches rather succulent, terete, smooth. Perfect l. on stout petioles, oblong, acute; base rounded, peltate, 6–9 in. long, $1\frac{1}{2}$–$2\frac{1}{2}$ in. broad. Fl. in axillary fascicles: pedicels $\frac{1}{2}$ in. long; calyx large, deep red, 5-lobed; upper lobe small: corolla pale yellow marked with orange-brown in the throat; tube slightly curved: limb 5-lobed; margin fringed: stamens 4, included. Costa Rica.

Alnus japonica. (*Gfl.* 1886, 549.) Cupuliferæ. H. An Alder with elliptic or elliptic-ovate, acuminate, serrate l., acute at the base, 2 to 4 in. long, 1 to 2 in. broad. Cones ellipsoidal, obtuse, $\frac{1}{2}$ to $\frac{3}{4}$ in. long, 5 to 6 lines thick. Japan.

Alnus rhombifolia. (*Ill. H.* 1888, 558.) H. An ornamental tree similar to *A. rubra*, but branches more slender, the dark brown bark scarcely dotted with white, and the nutlets with a thickened margin, not winged as in *A. rubra*. L. ovate or ovate-oblong, obtuse or acute, cuneate at the base, irregularly glandular-toothed, smooth above, slightly pubescent beneath, 2–3 in. long. California.

Alocasia æquiloba. (*K. B.* 1895, 119.) Araceæ. S. A species with pale green sagittate lobed l., 2 ft. long, and small green spathes. Intermediate between the entire-leaved and pinnatifid leaved species. New Guinea.

Alocasia argyrea. (*Sand. Cat.* 1895, 36.) S. L. hastate, lanceolate, very large, dark green, with a silvery sheen and prominent midrib.

Alocasia augustiana (*Ill. H.* 1886, t. 593; *Cat. Comp. Cont. d'Hort.* 1886, 5.) S. A fine Aroid allied to *A. zebrina*. The petioles are rosy, spotted and banded with brown. The blade of the l. is deeply cordate-ovate, acute, bright deep green above, paler beneath. Fl. unknown. New Guinea.

Alocasia Chantrieri. (*R. H.* 1887, 465, f. 92.) S. Garden hybrid.

Alocasia chantrieriana. (*Ill. H.* 1888, 79, t. 64.) S. Garden hybrid.

Alocasia conspicua. (*R. H.* 1891, 175, 367.) S. A garden hybrid between *A. odora* and *A. Putzeysi*.

Alocasia coriacea. (*G. C.* 1893, xii. 475.) S. L. dark green, with clear green ribs, the petioles rose-coloured when young, then rosy white, marbled with green.

Alocasia Curtisii. (*K. B.* 1894, 347.) S. A species allied to *A. decipiens*. L. stalk about 2 ft. long: blade 18 in. long, 12 in. broad, with long basal lobes, light and dark green above, purple beneath; peduncle 1 ft. long: spathe 6 in. long, pale yellow: spadix 6 in. long, yellow. Penang.

Alocasia Dussii. (*Gfl.* 1892, 412.) S. Aroid with large olive-green l. with brownish-red nerves and petioles.

Alocasia eminens. (*G. C.* 1887, i. 195.) S. A species of bold habit, allied to *A. thibautiana*. L. peltate, ovate-sagittate, growing to 20–22 in. long, by 9–10½ in. broad, dark green above, purple beneath on petioles 3½–4½ ft. long. Peduncles, 12–18 in. long, light green. Spathe 5–5¼ in. long, with a light green tube, and a reflexed oblong acute pale green limb. Spadix creamy-white. Malay Archipelago, Borneo?

Alocasia Gaulainii. (*W. G.* 1890, 380.) S. A robust plant with cordate l., dark green above with a silvery hue along the nerves, light violet beneath with blackish nerves.

Alocasia Gigas. (*L'Hort. Int. Cat.* 1888-9, 41.) S. No description or locality given.

Alocasia grandis. (*G. C.* 1886. xxvi. 390.) S. A foliage plant, with blackish petioles 3 to 3½ ft. long and large ovate-sagittate blades 20 to 24 in. long by 1 ft. broad, bright green above, blackish-green beneath: spathes white, marked with carmine lines outside, with a short mottled green tube; peduncles about 10 in. long. Malay Archipelago.

Alocasia guttata imperialis. (*Ill. H.* 1884, t. 541.) S. A foliage plant, with elliptic-sagittate acute l. 12–18 in. long, 9–15 in. broad; very dark green above, with slightly paler spaces between the nerves, purplish beneath. Spathe white, spotted with red on the tube. Borneo.

Alocasia Johnstoni. (*Bull. Cat.* 1878, 154.) S. Petioles long spiny mottled with blackish-green and red, the spines in whorls, and all pointing upwards: blade arrow-shaped, 1–2 ft. long, dark olive-green with reddish veins. [*Cyrtosperma Johnstonii*, N.E. Br.] Solomon Islands.

Alocasia Lindeni. (*Ill. H.* 1886, t. 603.) S. aroid, with ivory-white petioles, and cordate acuminate l. of a bright green, with distinct yellowish midrib and primary veins. Peduncles 3 to 4 in. long, ivory white. Spathe convolute, pale green. Spadix included, cylindric; ovaries small, scattered, numerous, pale green, rest of spadix white. New Guinea.

Alocasia luciana. (*Ill. H.* 1887, 75, t. 27.) S. Garden hybrid.

Alocasia Margaritæ. (*Ill. H.* 1887, 155, t. 611.) S. Petioles pubescent brownish-purple; the large blade of the leaf is cordate-sagittate, acute, repand, rather thick, somewhat bullate, dark green, with blackish nerves. Java.

Alocasia marginata. (*G. C.* 1887, ii. 712.) S. Petioles 2–3½ ft. long, pale green, marked with zigzag blackish-brown bars, and the sheath broadly margined with the same colour. Blade of l. 1½–2 ft. long, 11–14 in. broad, broadly cordate-ovate, margin slightly sinuate, apex shortly pointed, basal lobes oblong, obtuse, with a deep narrow sinus between them: upper surface dark green; lower dull leaden-green or purple tinted. Peduncle 9–10 in. long, pale rose-tinted, faintly barred. Spathe 6–7 in. long, the tube green, marked with blackish lines and dots, limb boat-shaped, greenish-white. Spadix as long or longer than the spathe. Brazil.

Alocasia mortfontanensis. (*R. H.* 1891, 174.) S. A garden hybrid between *A. Lowii* and *A. sanderiana*.

Alocasia nobilis. (*G. C.* 1892, xi. 731.) S. Name only.

Alocasia princeps. (*Bull. Cat.* 1888, 7; *L'Hort. Int. Cat.* 1888-9, 46.) S. Petioles slender, marbled with chocolate-brown. Blade sagittate: the hind lobes narrow and spreading, with a triangular sinus: margins deeply sinuate: upper surface metallic olive-green, darker along the midrib and veins: under surface greyish-green, with prominent, rounded, chocolate-brown veins. Malay Archipelago.

Alocasia pucciana. (*R. H.* 1887, 466.) S. Garden hybrid.

Alocasia Putzeysi. (*Lind. Cat.* 1882, 2; *Ill. H.* 1882, t. 439.) S. Like *A. longiloba*, having l. of a similar form, dark green, with the midrib, primary and secondary veins, and the margins bordered with white; the under side is dark purple. Sumatra.

Alocasia Reginæ. (*Ill. H.* 1885, t. 544; *Cat. Comp. Cont. d'Hort*, 1885, 2.) S. L. elliptic-cordate obtuse, dark shining green above, purplish beneath. The petioles are terete, green, and pubescent, as are also the veins on the under surface of the l. Spathe ivory-white, dotted with purple on the tube. Borneo.

Alocasia reversa. (*G. C.* 1890, viii, 38.) S. Not 1 ft. high, with ovate-sagittate l., coloured grey-green, the primary veins being broadly bordered with dark green. Philippine Islands.

Alocasia Rex. (*G. C.* 1892, xi, 731.) Name only.

Alocasia rodigasiana. (*R. H.* 1891. 174.) S. A garden hybrid between *A. thibautiana* and *A. Reginæ*.

Alocasia sanderiana. (*Fl. and P.* 1884, 94; *Bull. Cut.* 1884, 11, f. 3.) S. A foliage plant, with large peltate-sagittate, pinnatifidly lobed l. of a dark green colour, with a metallic blue reflection, and the midrib, veins, and margins white. Malay Archipelago, probably Borneo.

—— Var. **gandavensis.** (*Ill. H.* 1896, 267, t. 65.) S. A form with young l. of purplish ground colour with vermilion-tinted veins: this coloration remains constant on the under surface, but gradually changes to green on the upper surface.

Alocasia scabriuscula. (*G. C.* 1879, xii. 296.) S. per. in the way of *A. zebrina*, with roughish dull green petioles, densely covered with small blackish lines, large sagittate green l., and a cluster of infl. on short scapes in the centre of the plant; spathe 4½ in. long, white; tube ovoid; limb oblong cuspidate, at first erect, afterwards reflexed. North-west Borneo.

Alocasia sinuata. (*G. C.* 1886, xxiv. 678; *Gfl.* 1886, 157.) S. foliage plant, with sagittate l., having sinuate margins; the upper side of young l. is of a very dark green along the principal veins, with a lighter cheerful green between them; older l. are dark green: the under side is whitish-green. Peduncles about as long as the petioles or longer, light green. Spathe 3 in. long, entirely light green. Spadix shorter than the spathe, the rest white. Philippines.

Alocasia thibautiana. (*G. C.* 1878, ix. 527.) S. Like *A. Lowii*, but much larger: with ovate acute deeply cordate l., with rounded basal lobes, blackish-green with white veins. Borneo.

Alocasia Villaneuvei. (*Ill. H.* 1887, 59, t. 21.) S. Petioles spotted with brown, and the large ovate cordate-sagittate l. of a bright dark-green. Borneo.

Alocasia watsoniana. (*G. C.* 1893, xiii. 442, 569, f. 83.) S. A near ally of *A. Putzeysi*. It has large cordately lobed leaf-blades, with wavy margins, and coloured olive-green and dark purple on the upper surface, dark purple beneath. Sumatra.

Aloe abyssinica. (*W. G.* 1896, 102.) Liliaceæ. S. The following varieties are described by C. Sprenger: *erecta*, *glauca*, *robusta*, *recurvata*, *pygmæa*, *maculata*.

Aloe abyssinica Peacockii. (*B.M.* t. 6620: *Fl. and P.* 1882, 74.) S. succulent. A very distinct var., with dull glaucous green l., and paniculate racemes of lemon-yellow fl. Abyssinia.

Aloe aurantiaca. (*G. C.* 1892, xi. 780.) S. Between *A. arborescens* and *A. ciliaris*. Stem ¾ in. in diameter; l. 9 in. long, 1½ in. wide, apple-green, the margins spinous. Peduncles as long as the l.; fl. in a dense raceme, yellow tinged with red. South Africa.

Aloe Bedinghausii. (*M. K.* 1896, 24.) S. A garden hybrid between *Gasteria nigricans* and *Aloe longiaristata*.

Aloe Beguinii. (*M. K.* 1896, 24.) S. A garden hybrid between *Gasteria verrucosa* and *Aloe longiaristata*.

Aloe brachystachys. (*B. M.* t. 7399.) S. Allied to *A. abyssinica*; stem long, slender, erect; l. ensiform, 2 ft. long, 2 in. broad at the base, bright green, margins spinous; peduncle 2 ft., bearing a cluster of pink and yellow tubular fl. 1 in. long. Zanzibar.

Aloe Buchanani. (*K. B.* 1895, 119.) S. Near *A. Cooperi*, from which it differs by its smaller fl. and l. rounded at the back. Tropical Africa.

Aloe chloroleuca. (*G. C.* 1877, viii. 38.) S. Allied to *A. salmdyckiana*, differing in having the l. in a denser rosette and rather narrower: pedicels not longer than the lanceolate-deltoid bracts, and the fl. pale yellow. Stamens exserted. South Africa.

Aloe Chludowii. (*M. K.* 1896, 24.) S. A garden hybrid, whose parents are given as probably *Gasteria scaberrima* and *G. verrucosa*.

Aloe cyanea. (*M. K.* 1896, 24.) S. A garden hybrid between *A. glauca* and *A. incana*.

Aloe Derbetzi. (*R. H.* 1894, 147.) S. A garden hybrid between *Gasteria acinacifolia* and *Aloe rubro-cincta*.

Aloe Greenii. (*B.M.* t. 6520.) S. Rosette shortly caulescent. L. 15–18 in. long, 3 in. broad, about ¼ in. thick, concave on the face, except at base; margins armed with short prickles, bright green, marked with broad irregular transverse bands of whitish lines. Scape panicled above.

Infl. at first umbellate, the branches afterwards lengthening into racemes; perianth pale red, 1¼ in. long, abruptly inflated in a globose manner at base. South Africa (?)

Aloe heteracantha. (*B. M.* t. 6863.) S. L. lanceolate acuminate, 6 to 12 in. long, 1½ to 2½ in. broad, unarmed or with a few teeth on the margins, and with 1 or 2 raised lines down the face. Fl.-stem branching. Spike elongated, dense. Fl. 1½ in. long, bright coral-red. Probably the same as *A. inermis*.

Aloe Hildebrandtii. (*B. M.* t. 6981; *G. C.* 1888, iii. 242: *H. G.* 1838, 181; *R. H.* 1888, 479.) S. plant, with an erect laxly leafy stem: l. lanceolate-attenuate, 6–10 in. long, 1½–2 in. broad, of a glaucous green marked with a few white spots, and spiny on the margins: tubular fl. an inch long, laxly disposed in large branching panicles. Outer perianth segments coral-red, inner yellowish, with green keels. East Tropical Africa.

Aloe Holtzei. (*M. K.* 1896, 24.) S. A garden hybrid whose probable parents are given as *Gasteria intermedia* and *Haworthia Radula*.

Aloe Hoyeri. (*M. K.* 1896, 24.) S. A garden hybrid between *Aloe serrata* and *Lomatophyllum borbonicum*.

Aloe hybrida gloriosa. (*M. K.* 1896, 27.) S. A garden hybrid between *Lomatophyllum borbonicum* and *Gasteria maculata*.

Aloe imbricata. (*H. G.* 1893, 194.) S. A. garden hybrid, parentage not stated.

Aloe insignis. (*G. C.* 1885, xxiv. 40, 41, f. 8.) S. Hybrid Aloe, raised from seed of *A. drepanophylla* fertilised by the pollen of *A. echinata*. It has a short stem; ascending tapering glaucous green l., with prickles on the margins, and numerous prickly tubercles on the under surface of the l., and 1–3 rows of them on the upper surface. Fl.-stem 18–20 in. high, fl. numerous, racemose, drooping, whitish, with three green lines at the tips of the segments; buds coral-red, erect.

Aloe Kirkii. (*B. M.* t. 7386.) S. Allied to *A. brevifolia*. Stem short: l. dark green, 30–40 in a dense rosette, each nearly a foot long, 2 in. wide, with large marginal teeth; spike 2 ft. long, branched; fl. over 1 in. long, orange, tipped with brown. Zanzibar.

Aloe Laetii. (*M. K.* 1896, 24.) S. A garden hybrid between *A. ciliaris* and *A. succotrina*.

Aloe Lapaixii. (*M. K.* 1896, 27.) S. A garden hybrid between *Gasteria maculata* and *Aloe longiaristata*.

Aloe Lauchei. (*M. K.* 1896, 27.) S. A garden hybrid between *Gasteria pulchra* and *G. scaberrima*.

Aloe longiflora. (*G. C.* 1888, iv. 756.) S. Stem simple, bearing a lax rosette of tapering l., 15–18 in. long, 1½ in. broad, glossy green, armed with numerous green prickles on the margin. Raceme simple, dense, 6–8 in. long. Bracts ovate, scarious, ¼ in. long. Pedicels about as long as the bracts. Fl. cylindrical, 1½ in. long, pale yellow, tipped with green. Stamens, ½ in. longer than the fl., with small red anthers.

Aloe Luntii. (*K. B.* 1894, 342.) S. Stem short, bearing distichous l., which are lanceolate, thick, unarmed, recurved and green; fl. about 1 in. long, reddish-green, borne on a loose panicle. South Arabia.

Aloe Lynchii. (*G. C.* 1881, xv. 266.) S. succulent per. A curious hybrid raised between *A. striata* (*A. albocincta*) and *Gasteria verrucosa*. In general habit it resembles *A. striata*, but the l. are narrower and thicker, and are furnished with numerous immersed white spots. Fl. like those of an aloe, but with the short segments and lax disposition of a Gasteria: they are pale yellow at the middle, red at the base, and greenish towards the tip.

Aloe macrantha. (*B. M.* t. 6580.) S. Like *A. latifolia*, but with larger handsomely marked l., with large marginal teeth. Fl. umbellate; perianth 1½ in. long, orange-scarlet, shaded into green at the swollen globular base. South Africa.

Aloe Monteiroi. (*G. C.* 1889, vi. 523.) S. Near *A. obscura*, but with longer more channelled l., and duller coloured fl. Delagoa Bay.

Aloe Nowotnyi. (*M. K.* 1896, 27.) S. A garden hybrid of which *A. longiaristata* is one of the parents.

Aloe penduliflora. (*G. C.* 1888, iv. 178; *H. G.* 1888, 458.) S. The pendulous scape appears to arise from the base of the back of the lax, attenuate

pale green l., which are flattish above, and have small marginal prickles. Raceme dense, turned up at the end of the pendulous scape. Fl. pale yellow. Zanzibar.

Aloe Perryi. (*B. M.* t. 6596.) S. Stem rising to 1 ft. or more high. L. 12 to 20, in a dense rosette, lanceolate, 1 ft. long, 3 in. broad, dull glaucous green; margin armed with small brown prickles. Fl. racemose, yellow. This plant is the source of the Socotrine Aloes. Socotra

Aloe platylepis. (*G. C.* 1877, viii. 38.) S. Very similar in appearance to *A. chlorolenca*; the l. rather shorter and broader; bracts much broader, deltoid, ½ in. long and broad: pedicels not longer than bracts. Fl. coral-red or yellow, tipped and striped with green. Stamens exserted. South Africa.

Aloe pratensis. (*B. M.* t. 6705.) S. A handsome acaulescent species, with a dense rosette of ovate lanceolate acuminate l., 5–6 in. long, green with a slight glaucous tinge, the margins, and back of the apical part armed with stout brownish prickles. Fl.-stem densely clothed with broad-based very acuminate membranous bracts. Raceme gradually elongating; fl. nodding, 1¼ in. long, bright coral-red. South Africa.

Aloe Quehlii. (*M. K.* 1896, 27.) S. A garden hybrid between *Gasteria maculata* and *G. formosa*.

Aloe schmidtiana. (*Ill.* t. 970.) S. [*A. Cooperi*, Baker.]

Aloe simoniana. (*W. G.* 1893. 194.) S. A garden hybrid between *Gasteria disticha* and *Aloe longiaristata*.

Aloe striata oligospeila. (*G. C.* 1894, xv. 588.) S. Differs from the type by its more erect habit, taller stem, and narrower l., with a broad white border. British Kaffraria.

Aloe tricolor. (*B. M.* 6324.) S. Allied to *A. saponaria*. L. 6–8 in. long, 1½ in. broad, tapering to an acuminate point; margin spinose-dentate, dull green with tranverse bands of crowded oval whitish-green spots. Scape 1 ft. or more high, simple or branched. Fl. in short racemes, bright coral-red outside, with the margins of the segments whitish, pale yellow inside. South Africa (*l*).

Alpinia albo-lineata. (*Williams Cat.* 1880, 12.) Scitamineæ. S. An ornamental plant, 3–4 ft. high, with elliptic lanceolate pale green l., marked with oblique broad bands of white. New Guinea.

Alpinia mutica. (*G. C.* 1883, xix. 44; *Bull Cat.* 1883, 11; *Fl. and P.* 1883, 10.) S. Differs from *A. nutans* in its erect infl., and in the absence of the two short spurs at the base of the lip which are characteristic of *A. nutans*. Borneo.

Alpinia officinarum. (*B. M.* t. 6995; *G. C.* 1888, iii. 592; *G. and F.* 1888, i. 227; *H. G.* 1883, 311, 328.) S. Rhizome stout, creeping, swollen at intervals. L. narrow lanceolate, acuminate. Scape terminal, erect, pubescent. Fl. sessile, white, veined on the lip with purple. Calyx campanulate, 2-lipped. Corolla-lobes linear-oblong obtuse, ¾ in. long. Lip elliptic-oblong obtuse, a little longer than the corolla. South China.

Alpinia pumila. (*B. M.* t. 6832.) S. Plant, with creeping rootstock, dark l. variegated with white between the nerves, and short spikes of white fl. on short peduncles, rising from the rootstock. Calyx tubular, shortly 3-lobed, bright red. Lip broadly ovate, crenate, with erect sides, an erect subulate tooth on each side of the base. Veins marked with a bright crimson. East China.

Alpinia zingiberina. (*B. M.* t. 6944. *G. C.* 1887, ii. 108.) S. A plant of economic value. Rhizome stout, irregularly branched. Stems 4–5 ft. high, leafy. L. 10–12 in. long, oblanceolate-oblong, acute, dark green with a pale midrib, and pale green beneath. Panicle 10–12 in. long. Fl. 1 in. long, pale green, with a white lip veined with red on each side of a yellow disk, and having two horn-like processes at its base. Siam.

Alseuosmia macrophylla. (*B. M.* t. 6951.) Caprifoliaceæ. G. shr. bearing alternate elliptic-lanceolate acute serrate l., narrowed below into the petiole, and axillary clusters of drooping sweetly-scented fl., 1½ in. long, with a cylindric tube widening at the mouth, and five spreading-fringed lobes, white, streaked with red. New Zealand.

Alsophila atrovirens. (*G. and F.* 1893, vi. 194.) Filices. S. Stem 2 in.

in diameter, with a spreading head of broad tripinnate fronds. The pinnæ large, dark green, crisp and wavy. Brazil.

Alsophila atrovirens keriana. (*G. C.* 1887, i. 639.) S. Fronds bipinnate, oblong-lanceolate, 15–18 in. long, 6 in. broad: pinnæ lanceolate, 3 4 in. long, 1 in. broad: pinnules oblong, obtuse, crenate; sori placed midway between the midrib and margin. Stipes, 6–8 in. long, brown, muricated, without scales.

Alsophila contaminans. (*Ill. H.* 1882, t. 458.) S. A tree-fern with a tall trunk bearing a crown of large pinnate fronds: the pinnules oblong-lanceolate, acuminate, deeply pinnatifid: the segments oblong-falcate. India.

Alsophila lunulata. (*Williams' Cat.* 1880, 12.) S. Frequently growing to 25 ft. in height. Fronds large, tripinnate, subcoriaceous, green and glabrous on both sides. Rhachis pale, muricate. Pinnæ 1½–2 ft. long: pinnules close set, 4–5 in. long, with close set ligulate-falcate blunt segments 1 in. long, margins crenulated. Polynesia.

Alsophila marshalliana. (*G. C.* 1894, xv. 663.) S. A plant of dwarf habit, with dark shining fronds, the pinnæ being very crisp and gracefully waved. Brazil?

Alsophila Rebeccæ. (*Bull Cat.* 1882, 13, f. 10; *Fl. and P.* 1882, 74.) S. An elegant tree-fern with slender stem and elliptic bipinnate fronds. Rhachis clothed above with black fibrillose scales. Pinnules stalked, linear acuminate; base obliquely subcordate: margin incised-crenate. Queensland.

Alyssum wulfenianum. (*Gfl.* t. 880, f. a.) Cruciferæ. H. alpine plant of very dwarf habit. Stems 1–3 in. long, decumbent, and, as well as the small oblanceolate l., covered with a stellate pubescence. Fl. in a small compact corymb, golden yellow. Europe.

Alyxia bracteolosa. (*Gfl.* 1887, 71.) Apocynaceæ. S. climber, with the l. in threes, oblong or sublanceolate, obtuse or acuminate, acute or rounded at the base. Cymes axillary, many flowered, shortly pedunculate. Fl. hypocrateriform, with a long tube, pale yellow. Fiji.

Amaraboya amabilis. (*Ill. H.* 1887, 27, t. 9.) Melastomaceæ. S. A shr. with terete purplish stems, large opposite elliptic three-nerved l., and terminal umbels of large fl., pale pink edged with carmine. Colombia.

Amaraboya princeps. (*Ill. H.* 1887, 15, t. 4.) S. A shr., with square stems, large elliptic sessile 3-nerved l., dark green above, purplish beneath, and terminal few-flowered cymes, of very large showy bright carmine fl., with white stamens. Colombia.

Amaraboya splendida. (*Ill. H.* 1887, 15, under *A. princeps*, and 94, t. 34.) S. Somewhat similar to the above, but with larger carmine fl., which shade into rose and almost to white around the centre. Colombia.

Amaranthus atropurpureus. (*Fl. des S.* t. 2350–1.) Amarantaceæ. H. H. annual, in the way of *A. speciosus*, with similar foliage, but more dwarf and bushy, with the stems, petioles, under side of l., and the panicled spikes all deep purple-red. India.

Amaranthus Dussii. (*B. T. O.* 1896 178.) H. A handsome annual with brightly-coloured l. and fl. Perhaps a variety of *A. spinosus*. West Indies.

Amaranthus Margaritæ. (*W. G.* 1887, 433–4, f. 71.) H. Garden variety.

Amaranthus superbus. (*Ill. H.* 1896, 141, f. 15.) H. H. Probably a variety of *A. melancholicus* with elliptic l. blood-red above and crimson beneath.

Amaryllis Belladonna. (*B. T. O.* 1895, 16, t.) Amaryllidaceæ. H. H. Descriptions and figures of four varieties, viz.:—*alba*, *carminea*, *magnifica*, *stenopetala*.

Amaryllis leeana. (*Williams Cat.* 1889, 22.) S. Garden variety.

Amaryllis reticulata vittata. (*Fl. des S.* t. 2427–8.) S. Form, with white fl. closely reticulated with red. Garden hybrid.

Amaryllis Rougieri. (*R. H.* 1882, 312, f. 67, t.) S. [*Hippeastrum aulicum*, Herb.]

Amaryllis solandrifolia conspicua. (*Gfl.* t. 949, 956.) S. Fl. suffused and streaked with crimson purple.

Amaryllis Tettaui. (*Gfl.* 1888, 625.) S. Garden variety.

Amasonia calycina. (*B. M.* t. 6915; *R. H.* 1887. 192.) Verbenaceæ. S. A shr. with lanceolate acuminate toothed or sinuate l. and showy racemes of drooping yellowish tubular fl., with the calyx and the large leafy bracts bright crimson. [Syn. *A. punicea*, Hort.] British Guiana.

Amasonia erecta. (*B. M.* t. 7445.) S. A small shr. with brown stems, alternate oblong dark green l. and erect terminal panicles of tubular white and pink fl., subtended by orbicular leaf-like bracts. 1 in. long. coloured scarlet and yellow. South America.

Ambrosinia Bassii. (*B.M.* t. 6360). Araceæ. H.H. L. 2–4; petiole 1–2 in. long; blade l 2½ in. long. oval or oblong. obtuse, green. Peduncle shorter than petioles. Spathe convolute. ovoid. ending in a long tail curved over the front, internally divided by a longitudinal septum into two compartments, with the solitary ovary in the front compartment, and the sessile anthers seated on the back of the septum in the dorsal compartment. Sicily; Algeria.

Amelanchier alnifolia. (*G. and F.* 1888, i. 185. f. 34) Rosaceæ. H. An ornamental shr., 6–8 ft. high, with broad elliptic-oblong l., very obtuse. and toothed at the apex: slightly cordate at base. Racemes short. Fl. large. globose. ¼ in. in diam., dark purple. North-west America.

Amelanchier oligocarpa. (*G. and F.* 1888, i. 245. 247, f. 41.) H. A low bushy shr. 2–4 ft. high. with oblong acute crenulate glabrous l., and white fl. ¾ in. in diam., on long pedicels. solitary or in pairs. rarely 3–4 in a raceme. Fl. dark blue-purple, obovate or shortly oblong. Eastern United States.

Amomophyllum Patini. (*G.C.* 1877, vii. 139.) S. [*Spathiphyllum Patini*, N.E. Br.]

Amorpha canescens. (*B. M.* t. 6618.) Leguminosæ. H. Shr., 3–4 ft. high, with sessile pinnate l. and numerous terminal spikes of small blue fl. The 'Lead Plant.' United States.

Amorphophallus Eichleri. (*B. M.* t. 7091.) Araceæ. S. A tuberous aroid with a solitary l. 18 in. high: the blade much divided, green. Spathe cup-shaped, 2 in. across. purple and white; spadix 6 in. high. erect. club-shaped, brown. West Tropical Africa.

Amorphophallus Elliotii. (*B. M.* t. 7349.) S. The type of a section *Podophallus*. Tuber fleshy: l. 1 ft. high: blade trisect pinnatifid: scape 1 ft., bearing a short. broad hooded spathe with a small aperture: colour pink and green with blotches and zones of brown-purple; spadix shorter than the spathe. purple. Sierra Leone.

Amorphophallus glabra. (*G. C.* 1895, xvii. 484.) S. Allied to *A. variabilis*, which it resembles in general characters. but the spadix is shorter and the fl. have a pineapple-like fragrance. Queensland.

Amorphophallus Lacourii. (*Ill. H.* 1878, t. 316.) S. foliage plant. Tuber, throwing up one l., petiole terete, striate-sulcate, pale with olive-green bars; lamina composed of three pinnate branches; leaflets lanceolate, acuminate, bright green, spotted with white. Phu-quoc Island, Cochin China.

Amorphophallus oncophyllus. (*B.M.* t. 7327.) S. Root-stock tuberous 10 in. in diameter; l.-stalk 3 ft. high by 1 in. in diameter. green with pale green blotches: blade 3½ ft. across, divided into numerous lanceolate pinnæ. Peduncle half as long as the l., spathe nearly a foot long. bell-shaped at the base, and coloured inside deep brown-purple with yellow blotches; spadix erect, smooth, cream yellow. Odour very disagreeable. Andaman Islands.

Amorphophallus virosus. (*G. C.* 1885. xxiii. 759.) S. Much like *A. campanulatus*, but with much smaller infl. spathe being about 9 in. long, and 6 in. diam., pale green, marked with round white spots, and a broad purple margin. purple inside at the rugose base and upper part purple, middle part rich cream colour. Spadix about 7 in. long, with a subglobose rugulose brownish or purplish appendix. Siam.

Ampelovitis Davidi. (*R. H.* 1889, 204, t.) Ampelidaceæ. H. Vine, with the l. either simple. lobed. or digitate. shining green above, glaucous below. Fr. black, in loose bunches. North China.

Ampelovitis intermedia. (*R. H.* 1891, 334.) H. Vine of vigorous growth with the stems and petioles beset with stout bristles. The l. are large, coriaceous, and vary from cordate-entire to palmately 5-lobed.

Ampelovitis Romaneti. (*R. H.* 1892, 94.) H. A vine with lobed l., glaucous beneath, and narrow bunches of black grapes. China?

Amygdalus Boissieri. (*R. H.* 1879, 229, f. 62–64.) Rosaceæ. H. Shrub, 4–6 ft. high, with narrow elliptic l., soon falling off, sessile solitary or geminate fl., and globose tomentose fr., about ¾ in. in diam. Asia Minor.

Anabasis Ammodendron. (*W. G.* 1888, 37.) Chenopodiaceæ. H. shr., with leafless woody stems and an abundance of small yellow fl. Central Asia.

Anacyclus radiatus purpurascens. (*Gn.* t. 1074.) Compositæ. H. annual. L. bipinnatifid with small linear segments: heads solitary, large, radiate, white or yellow, with the underside of the ray purplish. Spain.

Anagallis collina alba. (*Gn.* t. 1125.) Primulaceæ. H. per. Short erect crowded stems, densely beset with small lanceolate l., and producing an abundance of axillary white flowers.

Ananas macrodontes. (*B. H.* 1878, 140, t. 4–5.) Bromeliaceæ. S. A fine plant with very long, arched, channelled l., dull green above, greyish-green beneath, armed on the margins with stout brown spines. Fl. purple, in a large dense bracteate head: bracts ovate-acuminate, with spinose-dentate margins, reddish when in fl., deep brown at base in fr., fading upwards into pale whitish-brown. Fr. obpyriform, yellowish, half as long as the bracts. Brazil.

Ananas Mordilona. (*B. H.* 1879, 302.) S. L. without spines. The fr. is large, and has a fine aroma. Colombia.

Ananassa bracamorensis. (*Lind. Cat.* 1879, 6.) Bromeliaceæ. S. Fr. very large. Brazil.

Ananassa porteana. (*R. H.* 1878, 140.) S. L. long, narrow, curved, traversed with bands of yellow, with toothed margins of a light brown.

Anchusa affinis. (*B. T. C.* 1896, 220, f. 12.) Boraginaceæ. H. annual or per. with large Forget-me-not-like flowers. Abyssinia.

Andersonia cœrulea. (*Gn.* t. 1180, f. 2.) Epacridaceæ. G. shr., resembling an *Epacris* in habit, with short ovate acuminate erect or spreading l., and dense terminal spikes of light blue fl., with red calyx-segments ciliate with white hairs. Australia.

Andersonia depressa. (*Gn.* t. 1180, f. 1.) G. shr. A small species, with lanceolate acuminate spreading l., and close spike-like panicles of pale blue fl., with light green calyx-segments, ciliate with long white hairs. Australia.

Andersonia homalostoma. (*Gn.* t. 1180, f. 3.) G. shr., with ovate-acute l., and small dense spikes of bright blue fl., with red glabrous calyx-segments. Australia.

Andromachia Maroni. (*R. H.* 1887, 496.) Compositæ. G. or H. H. herb, per. about 2 ft. high, white-tomentose. L. petiolate, triangular-hastate, distantly toothed, 4–5 in. long, 3–4 in. broad. Heads corymbose, on long pedunceles, radiate, pale yellow. Brazil.

Andromeda japonica elegantissima. (*R. H.* 1887, 83.) Ericaceæ. H. [*Pieris japonica*, var.]

Androsace albana. (*G. C.* 1892, xii. 399.) Primulaceæ. H. per. having small rosettes of bright green, toothed l. Fl. in umbels, pinkish. East Caucasus.

Androsace britanica. (*W. G.* 1890, 34.) H. alpine, growing to 2 in. in height, with white fl.

Androsace caucasica. (*G. C.* 1892, xii. 399.) H. per. with dense rosettes of narrow toothed l. Fl. almost stemless, in clusters, bright pink. Caucasus.

Androsace cylindrica. (*W. G.* 1890, 34.) H. alpine, with lanceolate-oblong obtuse pubescent l. growing to ½ in. long, and pure white flowers.

Androsace foliosa. (*B.M.* t. 6661.) H. alpine, large for the genus. L. petiolate, elliptic, acute, 2–3 in. long, softly hairy: scape 3–5 in. high, bearing a many-flowered umbel of pink or pale purple fl., ½ in. in diam.

Androsace Laggeri. (*Gfl.* t. 969.) H. per. A plant. with laxly tufted moss-like stems, producing numerous small dense umbels of pink fl., on scapes 2–3 in. long. Pyrenees.

Androsace rotundifolia. (*B. M* t. 6617.) H. per., with petiolate roundish lobulate crenate l., 1–2 in. across, and a slender scape bearing an umbel of bright pink fl., with large leafy calyx extending beyond the corolla. Himalaya.

Androsace sarmentosa. (*B. M.* t. 6210.) H. per. of dwarf tufted habit, throwing out numerous long runners. L. rosulate, oblanceolate, with silky hair. Fl. umbellate, rosy-purple. Himalaya.

Androsace sempervivoides. (*Gard.* 1893, xliv. 466.) H. Near *A. sarmentosa*, but having the l. curled up into a cone. Fl. bright purple. Western Tibet.

Androsace wulfeniana. (*B. G.* 1890. 35.) H. form of *A. alpina*, but with the l. less pubescent, and large rosy-purple flowers.

Anemidictyon Phyllitidis tessellata. (*Bull Cat.* 1878, 3.) Filices. S. Fronds dimorphous, ternately branched; the two lateral branches erect, contracted, fertile; the terminal branches leafy, spreading, sterile, pinnate, with broad obliquely ovate pinnæ; venation reticulated in elongate meshes pointing towards the apex; veins dark green on a paler green ground, sometimes with a band of bright green along the centre of pinnæ. Brazil.

Anemone blanda scythinica. (*Gard.* 1895, xlvii. 279.) Ranunculaceæ. H. A form with pale blue and white fl. North Kurdistan.

Anemone caffra. (*G. C.* 1890. vii. 389.) G. L. palmately lobed, 8 in. across, dark green. Fl. white, 3 in. across, on scapes 15 in. high. South Africa.

Anemone Eunrenia. (*B. T. O.* 1894, 226.) H. Probably a form of *A. coronaria* or *A. hortensis*. Persia.

Anemone Fanninii. (*G. C.* 1886. xxv. 432, f. 84: *B.M.* t. 6958.) G. per. L. large palmately lobed: stem tall 2- to 3-flowered bearing handsome white fl. 2½ to 3 in. in diam. Natal.

Anemone nemorosa robinsoniana. (*Gfl.* t. 945.) H. A pretty var. with very pale blue flowers.

Anemone polyanthes. (*B.M.* t. 6840.) H.H. or H. per. L. on long petioles, 2 to 4 in. in diam., orbicular, lobed and toothed, cordate at the base. Peduncle stout, bearing a branching many-flowered umbel of pretty white fl. 1½ to 2 in. in diam., surrounded at the base by a leafy involucre of broadly cuneate of lobed and toothed sessile l. Himalaya.

Anemonopsis macrophylla. (*B.M.* t. 6413.) Ranunculaceæ. H. per. herb. 2–3 ft. high and quite glabrous. L. on very long petioles, biternately compound, with large ovate-lanceolate leaflets, unequally serrate. Fl. in lax few-flowered bracteate racemes, pale lilac, drooping, 1½ in. in diam., on pedicels 2–4 in. long. Sep. about 9, spreading, concave. Pet. about 12, erect, imbricate, ⅓ as long as sep., oblong. Carpels 3, with slender subulate styles. Fruit-carpels 2, with 9–10 seeds in each; seeds with quadrate flat processes arranged in series. Japan.

Angræcum apiculatum dormannianum. (*G. C.* 1886. xxiv. 456.) Orchidaceæ. S. A small-flowered var. with vermilion-flaked ovaries, and vermilion tips to the sepals.

Angræcum avicularium. (*G. C.* 1887. i. 40.) S. L. 4 in. long, 2½ in. broad, cuneate, oblong-elliptic, 2-lobed. Fl. racemose, white; sep. and pet. lanceolate-cuspidate; lip oblong, cuspidate, narrow at base; spur 4–5 in. long; anther and rostellum resembling a bird's head.

Angræcum bilobum Kirkei. (*G. C.* 1882, xviii. 488; *Williams' Cat.* 1883, 24.) S. A small, narrow-leaved form, with drooping racemes of white fl., having spurs 2½–3 in. long. Zanzibar

Angræcum bistortum. (*K. B.* 1893 65.) S. Allied to *A. arcuatum*, but with much smaller fl., which are peculiar in having a looped spur West Tropical Africa.

Angræcum calligerum. (*G. C.* 1887, ii. 552.) S. L. slightly glaucous, bilobed at apex. Fl. as large as those of *A. Ellisii*, with oblong acute sep., having a semi-oblong tubercle on the base of the keel: pet. cuneate-oblong, acute; lip panduriate, acute, with a slender spur 6–7 times longer than the ovary.

Angræcum christyanum. (*G. C.* 1880, xiii. 806.) S. A plant with the aspect of *A. arcuatum*, but with smaller yellow or greenish-white fl.

Angræcum cryptodon. (*G. C.* 1883, xix. 307.) S. In the way of *A. articulatum*, from which it differs in its wider-based spur, in having two teeth at the base of the lip, and two angular projections under the column. Fl. white with the base of the spur and ovary reddish. Madagascar.

Angræcum descendens. (*G. C.* 1882, xvii. 558.) S. Like *A. Ellisii*, but differing in its stronger spur, less nerved pet., cuneate ovate lip, and shorter hairy column.

Angræcum eichlerianum. (*W. G.* 1882, 434, f. 102; *Fl. and P.* 1883, 41). S. Stems tall, leafy: l. distant, oblique, elliptic, obtuse: fl. large, solitary: sep. and pet. lanceolate, light green: lip large, white, obcordate with a triangular apiculus in the notch; spur erect, conical, about as long as the sep. Loango, West Africa.

Angræcum fastuosum. (*G. C.* 1881, xvi. 748, 844.) S. L. cuneate-oblong, bilobed, rugose, 3 in. long and as much in breadth. Fl. as large as those of *A. caudatum*, but with broader oblong acute sep.: lip narrower, more acute, or obovate and rounded, and the spur shorter. Madagascar.

Angræcum florulentum. (*G. C.* 1885, xxiii. 787.) S. A free-flowering species with a zig-zag stem and lanceolate, bilobed l., 3 in. long; racemes numerous, 1–3-flowered. Sep. lanceolate; pet. broader; lip oblong, lanceolate, apiculate; spur filiform, longer by one-third than the ovary. Comoro Islands.

Angræcum Fournieræ. (*R. H.* 1896, 256, f.: *O. R.* 1896, 196). S. [*A stylosum*, Rolfe, *K. B.* 1895, 194.]

Angræum fournierianum (*G. C.* 1894, xv. 808; xvi. 43, f. 7.) S. Allied to *A. eichlerianum*, but the fl. are larger, being 2 in. wide, and of a purer white; the apex of the labellum is prolonged into an acute tongue. Madagascar.

Angræcum fragrans. (*B. M.* t. 7161: *G. and F.* iv. 103.) S. L., when dry, are used as tea in Bourbon. Fl. pure white in axillary racemes. Bourbon and Mauritius.

Angræcum fuscatum. (*G. C.* 1882, xviii. 488.) S. Similar to *A. bilobum*, with cuneate oblong unequally bilobed l., and a thin lax raceme of many fl.: sep. ochreous, the lateral ones reflexed; pet. broader, lip oblong, acuminate, white: spur long, filiform, flexuose, brown. Madagascar.

Angræcum germinyanum. (*B. M.* t. 7061.) S. A loose-growing species with leafy stems; l. 2 in. long: fl. solitary on axillary peduncles, pure white, with long subulate pet. and sep., a broad tailed labellum, and a spur nearly 6 in. long. Madagascar.

Angræcum glomeratum. (*G. C.* 1886, xxiv. 678.) S. L. narrow, bilobed. Fl. white, numerous, in a compact head, sweet scented: in structure like those of *A. clandestinum*, but the lip is less open, and the spur straight and parallel to the smooth white ovary.

Angræcum grandidierianum. (*R. H.* 1887, 42, f. 9.) S. A dwarf species with thick oblong l., obtuse and unequally bilobed at the apex. The fl. are not described at the above place, but Reichenbach (*Flora*, 1885, p. 381) describes the raceme as being 1–3 flowered: the sep. cuneate-oblong, acute: the pet. spathulate, apiculate: and the lip cordate-panduriate or cordate-oblong, blunt, with a long filiform spur. The fl. are ivory white and about the same size of those of *A. chailluanum*. Comoro Islands.

Angræcum henriquesianum. (*G. C.* 1890, viii. 166; *H. G.* 1890, 555.) S. Closely allied to *A. bilobum*, Lindl., but a much smaller plant in every respect. St. Thomas' Island, West Africa.

Angræcum Hildebrandtii. (*G. C.* 1878, ix. 725.) S. A small species with ligulate unequally bilobed l., and a very lax spike of small yellow-orange fl. Sep. and pet. ligulate, blunt, 1–1½ line long; lip oblong, acute, with a filiform clavate spur, shorter than the stalked ovary. Comoro Islands.

Angræcum hyaloides. (*G. C.* 1880, xiii. 264.) S. L. very thick. Peduncle short, with a single hyaline fl. Sep. and pet. ligulate. Lip oblong. Spur long and filiform. Madagascar.

Angræcum ichneumoneum. (*G. C.* 1887, ii. 681.) S. L. oblong, 1 ft. long, by 2 in. broad, unequally bilobed at the apex, shining dark green. Racemes long, lax. Bracts cup-shaped. Sep. and

pet. oblong. subacute dirty ochreous-white. Spur much thickened at the apex. West Tropical Africa.

Angræcum imbricatum (*G. C.* 1887, i. 15.) S. A rather curious species, with a tall strong stem, leathery cuneate-oblong bluntly bilobed l., and cluster-like racemes of sweet-scented creamy-white fl., with orange and yellow lips. Sep. and pet. lanceolate. Lip flabellate, retuse, apiculate, convolute: spur recurved, blunt, not half as long as the blade of the lip, which it nearly touches. West Tropical Africa.

Angræcum Kotschyi. (*Veitch Cat.* 1881, 5, 14; *G. C.* 1881, xiv. 456, 693, 694, f. 131; *B. M.* t. 7442.) S. L. shining, thick, spathulate, unequally bilobed. Fl. ivory-white of firm texture. Lip pandurate, with two short teeth at its base: spur very long, reddish, often twisted. East Tropical Africa.

Angræcum modestum. (*B. M.* t. 6693.) S. L. elliptic-oblong, almost entire at the somewhat acute apex. Infl. an elegant raceme of white fl., with oblong acute segments, the lip broader than the rest, spur slender, nearly straight, twice as long as the pedicel. Madagascar.

Angræcum obrienianum. (*G. C.* 1892, xi. 816.) S. A thick-leaved species allied to *A. chailluanum*, with greenish-white long-spurred fl.

Angræcum ophioplectron. (*G. C.* 1888, iv. 91.) S. Allied to *A. curnowianum*. Sep. 1 in. long, $\frac{1}{6}$ in. broad, narrow acuminate, spreading: pet. narrower, curved down behind the side sep. Lip triangular, acuminate, with a filiform spur 4 times as long as itself and twisted near the base. Fl. greenish yellow, with a white lip and reddish-ochre spur. Madagascar.

Angræcum pallidum. (*G. and F.* 1890, 78: *W. G.* 1890, 156.) S. A species in the way of *A. pellucidum*, but with l. 2 ft. long, and numerous long spikes of white fl. West Africa.

Angræcum polystachyum. (*G. C.* 1889, v. 552.) S. A small plant, with ligulate bilobed l., and racemes of small pale green fl.

Angræcum primulinum. (*G. C.* 1890, vii. 388.) S. Intermediate between *A. hyaloides* and *A. citratum*. Madagascar.

Angræcum rostellare. (*G. C.* 1885, xxiii. 726.) S. L. cuneate-oblong, bilobed at apex, soft. Peduncles numerous, many flowered. Fl. something like those of *A. fuscatum*, having a similar lip, a long ascending linear rostellum, and spathulate apiculate petals. Comoro Islands.

Angræcum sanderianum. (*G. C.* 1888, iii. 168, 395; *G. and F.* 1888, 16: *H. G.* 1888, 178; *R. H.* 1888, 516, t.) S. Allied to *A. dependens*. Stem ascending. L. cuneate-oblong, about 4 in. long and $1\frac{1}{4}$–$1\frac{3}{4}$ in. broad, the apex unequally lobed. Pedicel with short tumid base not longer than the bract. Sep. triangular. Pet. and lip elliptic, apiculate. Spur slender, 3 times as long as the ovary ascending. Fl. white, $\frac{3}{4}$ in. in diam. Comoro Islands.

Angræcum scottianum. (*G. C.* 1879, x. 556.) S. L. subulate-terete, channelled down the face, bicarinate on the back, $3\frac{1}{2}$ in. long, $\frac{1}{8}$ in. thick; peduncle slender; fl. solitary, white with an ochraceous spur. Comoro Islands.

Angræcum Smithii. (*K. B.* 1895, 37.) S. A minute leafless species, with fascicled roots and racemes 1 in. long, bearing small brownish fl. Kilimanjaro, East Tropical Africa.

Angræcum stylosum. (*K. B.* 1895, 194.) S. Allied to *A. apiculatum* which it resembles in habit, but the fl. are twice as large and white; spur brownish. Madagascar.

Angræcum tridactylites. (*G. C.* 1888, iv. 34; *L. G.* 1888, 397.) S. Allied to *A. bicaudatum*. Pseudobulbs sub-compressed, with sub-acute angles $\frac{1}{4}$ in. broad. L. linear, 3–5 in. long, 5–8 lin. broad, unequally bidentate. Racemes lateral, about 2 in. long. Fl. distichous, $\frac{1}{3}$ in. in diam., buff-coloured. Sep. and pet. ovate, acute. Lip 3-lobed, with 2 fleshy marginal teeth at the base; the lateral lobes bristle-shaped, recurving. Sierra Leone.

Anguloa dubia. (*G. C.* 1882, xvii. 764.) Orchidaceæ. G. Like *A. uniflora*, with yellow sep. and pet. dotted with purple, and a white lip blotched with purple; the lip is compressed, with angular side lobes, a very small triangular reflexed front lobe, and a few short hairs. Colombia.

Anguloa intermedia. (*G. C.* 1888, iii. 798 ; *H. G.* 1888, 296 ; *L.* iv. t. 8.) G. Garden hybrid.

Anguloa madouxiana. (*L.* x. t. 434 ; *J. O.* v. 124.) G. A garden hybrid, supposed to be between *A. Ruckeri* and *A. uniflora*.

Anguloa Mantini. (*Ill. H.* 1895. 187.) G. A var. of *A. uniflora* with slightly rose-tinted fl. Peru.

Anguloa media. (*G. C.* 1881. xvi. 38.) G. A garden hybrid between *A. Clowesii* and *A. Ruckeri*.

Anguloa purpurea. (*Ill. H.* 1881, t. 427.) G. Pseudobulbs large conical : l. large broadly oblong : fl. solitary large dark purple, yellow on the outside. Temperate Andes of Venezuela.

Anguloa Ruckeri alba. (*G. and F.* 1888, i. 315.) G. A white-flowered variety.

—— Var. **retusa.** (*G. C.* 1883, xx. 135.) G. Fl. yellowish outside, full of dark purple spots inside ; lateral lopes of the lip rectangular ; middle lobe small, reflexed, hairy.

Anguloa uniflora Treyerani. (*L.* vii. t. 310.) G. A var. having the base of the lip marked with more numerous rosy bars than usual. Andes.

Anhalonium Lewinii. (*Gfl.* 1888. 410-11, f. 92 ; *H. G.* 1888, 461.) Cactaceæ. S. succulent about 2 in. in diam. The central part convex, and densely white-villous : the outer tubercles, in about 12 series, broad, polyhedric, glabrous, with a woolly tuft at their apex. Fl. small, pale rose, arising among the central tubercles ; sep. in two series, acute ; pet. about as long as the sep., very obtuse. Mexico.

Anhalonium prismaticum. (*Gard.* 1889, xxvi. 238.) S. [*Mammillaria aloides*, Monv.]

Anneslia grandiflora. (*R. H.* 1875, 140.) Leguminosæ. S. [*Calliandra grandiflora*, Benth.]

Anœctochilus Boylei. (*Williams' Cat.* 1881, 30.) Orchidaceæ. S. A species of the setaceous group. L. ovate-acuminate, about 3 in. long, 2 in. broad, olive green, netted and pencilled with gold.

Anœctochilus concinnus. (*Bull. Cat.* 1878, 154.) S. of vigorous growth and sturdy habit. L. 2½ in. long, 1½ in. broad, ovate acuminate, rounded at base, dark olive green, with longitudinal ribs of a bright golden red ; the intermediate spaces reticulated with the same colour. Assam.

Anœctochilus Heriotii. (*Williams Cat.* 1881, 30.) S. Like the *A. Boylei*, but more robust. L. of a dark mahogany colour, veined with gold and with a fainter reticulation.

Anœctochilus hieroglyphicus. (*Bull. Cat.* 1878, 154.) S. L. small ovate or ovate-elliptic, on rather long pale petioles ; lamina dark green, marked with confluent and very irregular blotches of silver-grey. Assam.

Anœctochilus inscriptus. (*Bull. Cat.* 1878, 154.) S. L. ovate, rich velvety olive-green, netted with reddish golden veins. Assam.

Anœctochilus Lansbergiæ. (*Ill. H.* 1887, t. 1 ; *G. C.* 1887, i. 421.) S. A dwarf foliage plant, with broadly ovate acute l., the ground colour of which is of dark velvety green in the middle, reticulated with emerald green, shading into rich brown reticulated with old gold on the borders and edged with yellow. Fl. unknown. Malaya.

Anœctochilus ornatus. (*Bull. Cat.* 1878, 154.) S. L. broadly ovate acute, velvety, olive-green with a broad golden central band, and veined and reticulated with reddish golden veins. Assam.

Anœctochilus sanderianus. (*G. C.* 1895, xviii. 484.) S. L. ovate, 4 in. long, dark olive green with yellowish reticulations ; scape 1 ft. high ; fl. pale green. [*Macodes sanderiana*, Rolfe.] Sunda Islands.

Anoiganthus breviflorus. (*G. C.* 1888, iv. 411, misprinted Anigosanthus.) Amaryllidaceæ. G. bulb, with strap-shaped l., 1 ft. long by ¾ in. broad, and a scape about 9 in. long, bearing an umbel of several tubular bright yellow fl., about 1 in. in diam. This is cultivated in some gardens under the erroneous name of *Cyrtanthus lutescens*. Natal.

Anoplanthus Biebersteini. (*Gfl.* t. 1000.) Orobanchaceæ. H. parasite. A very interesting plant, but probably not suitable for cultivation on account

of its being a parasite. The stem is brown, having a few sheathing scales. The fl. is terminal and solitary. Corolla strongly recurved, pallid outside, bright red within. Caucasus.

Anoplophytum amœnum. (*B. H.* 1883, 265, t. 17; *R. H.* 1884, 395.) Bromeliaceæ. S. epiphyte, with slender stems 4–8 in. long; crowded narrow arched smooth canaliculate subulate green l. 4 in. long, and a short stem bearing about 4 pale mauve fl. with rosy bracts. Brazil.

Anoplophytum incanum. (*B. H.* 1881, 209, t. 11.) S. L. silvery. [*Tillandsia Gardneri*, Lindl.]

Anoplophytum strictum. (*B. H.* 1878, 188, t. 13.) S. [*Tillandsia stricta*, Soland.]

—— Var. **Krameri.** (*R. H.* 1888, 350.) S. A *Tillandsia* resembling *T. stricta*, but the l. are longer, much more slender, and perhaps rather more mealy. The bracts are deep rose, the calyx rosy-white, and the corolla white in the lower half and clear violet in the upper half. [*Tillandsia Krameri*, Baker.] Brazil.

Anredera scandens. (*Dammer, Cat.* 1889, 4.) Chenopodiaceæ. G. per. climber, with fleshy light green l. and long cylindrical racemes of white fl. Texas.

Ansellia confusa. (*L.* t. ii. 6.) Orchidaceæ. S. Figured in the Botanical Register for 1846, t. 30, as *A. africana*. It differs from typical *A. africana* in having its pet. scarcely broader than the sep. West Tropical Africa.

Ansellia congoensis. (*Ill. H.* 1886, 143; *Cat. Comp. Cont. d'Hort.* 1886, 2.) S. Allied to *A. africana*, but more floriferous. The fl. are produced in racemes, with erect pedicels; the sep. and pet. are similar, light greenish-yellow, with dark purple-brown spots; the lip has whitish side-lobes, veined with purple and a narrow yellow front-lobe; the two keels on the disk almost vanish before reaching the middle of the front lobe. Congo.

Ansellia gigantea. (*G. C.* 1878, ix. 398.) S. epiphyte in the way of *A. africana*, with smaller fl. of a light yellow, with very few narrow transverse brown bars; the deep yellow lip, without warts on its middle lobe, and with more or less crenulate keels. Natal.

Ansellia humilis. (*Bull Cat.* 1891, 3: *Gn.* 1891, 333.) S. epiphyte. A compact free-growing species with large panicles of lemon-yellow fl., blotched and barred with chocolate, each about 2 in. in diam. Var. *pallida* differs in having the ground colour of the fl. milk-white. Zambesi.

Ansellia nilotica rossiana. (*O. R.* vi. 199.) S. A var. with paler-coloured fl. than the type.

Anthemis biebersteiniana marschalliana. (*Gn.* t. 936.) Compositæ. H. herbaceous plant, with whitish-green bipinnatisect l., the ultimate segments of which are linear-terete. Scape a foot or more long, one-headed: heads 1 in. or rather more in diameter, radiate, bright yellow. Caucasus.

Anthemis macedonica. (*Gard.* 1894, xlv. 519.) H. A rock plant 6–8 in. high, with white daisy-like fl., having a dark yellow centre. Macedonia.

Anthericum echeandioides. (*B. M.* t. 6809.) Liliaceæ. G. L. broadly linear-lanceolate, about 1 ft. long. Fl. stem about 2 ft. high, ending in a long lax raceme. Fl. bright yellow about 1 in. in diam. Mexico.

Anthericum Gerrardi. (*G. C.* 1876 vi. 100.) G. per. in the way of *A. ramosum*. L. 4–6 to a stem, narrow linear, channelled down the face, acutely nerved on the back, glabrous. Fl.-stem 1–1½ ft. high, frosted all over with hard white papillæ; panicle corymbose, ½–1 ft. long and broad. Fl. pure white with a green keel. South Africa.

Anthericum graptophyllum. (*G. C.* 1882, xvii. 460.) G. L. lanceolate, glabrous, ciliate, strongly-ribbed, light green barred with darker green. The small white fl. in lax racemes. Socotra

Anthericum makoyanum. (*Gn.* t. 1007.) G. per. A foliage plant. L. linear acuminate, gracefully arching, dark green, margined and striped with white or yellowish. Scape 2–3 ft. high, sparingly branched. Fl. distant, three together in the axil of each bract, pedicillate, white.

Anthocleista insignis. (*K. B.* 1895, 150, 158.) Loganiaceæ. S. A tree 70 ft. high, with large oblong shining l., 4½ ft. long, 15 in. wide: cymes many flowered: fl. 1½ in. long, yellow. Swaziland.

Antholyza Schweinfurthii. (*G. C.* 1894, xv. 588.) Iridaceæ. G. Allied to *A. abyssinica*, but smaller in all its parts. Fl. bright red and yellow, in simple loose spikes. Abyssinia.

Anthurium acutum. (*G. C.* 1887, ii. 776.) Araceæ. S. per. about 1 ft. high, with slender petioles, and triangular hastate exceedingly acute dark green l. Peduncle 12-14 in. long, terete; spathe reflexed, 2 2¼ in. long, ⅓ in. broad, tapering to a subulate apex. Spadix subsessile 2¾–3 in. long, tapering, dull dark green. Brazil.

Anthurium Allendorfii. (*Fl.* 1889. 121, t. 1293.) S. A hybrid derived from *A. andreanum*, and *A. Lindigii*.

Anthurium andreanum. (*Ill. H.* 1877, t. 271.) S. per. Petioles slender, 8–12 in. long; blade about as long as the petiole, oblong-ovate, acute, deeply cordate at base, bright green. Peduncle much longer than the petiole, slender, rigid. Spathe vivid scarlet or orange-scarlet, slightly spreading, veined, concave, 3–4 in. in diameter, orbicular-ovate acute, deeply cordate, amplexicaul at base; margins slightly undulate. Spadix a little shorter than the spathe, recurved, pale golden yellow, with a broad belt of white in the middle. Colombia.

—— Var. **album.** (*Veitch Cat.* 1895, 2.) S. Fl. as large as the type, but less corrugated, the spadix rigid, the whole pure white.

—— Var. **amœnum.** (*G. C.* 1893, xiii. 415.) S. A seedling variety with a rose-carmine spathe and a white spadix tipped with yellow.

—— Var. **atropurpureum.** (*B. H. B.* 1889, 169, t.) S. A garden hybrid between *A. andreanum* and *A. Chantrieri*.

—— Var. **atrosanguineum.** (*G. C.* 1893, xiii. 415.) S. A seedling var. with dark crimson spathes.

—— Var. **flore albo.** (*R. H.* 1887, 171.) S. Garden variety.

—— Var. **wambekeanum.** (*Ill. H.* 1892, 109, t. 163.) S. A var. with white spathes.

Anthurium brevilobum. (*C. G.* 1887, i. 380.) S. A moderate-sized species with petioles 12–15 in. long, terete, acutely channelled down the face; and cordate-ovate blades 8–10 in. long, 4–5 in. broad, somewhat abruptly acuminate at apex, bright shining green. Peduncle 12–16 in. long. Spathe 2 in. long, ⅓ in. broad, narrow lanceolate acuminate, purplish. Spadix dark purple-brown, slender, 3–4 in. long, on a stalk ⅛–⅜ in. long.

Anthurium Brownii. (*G. C.* 1877, vi. 744, ff. 139, 140.) S. evergreen per. Stem very short, encircled with fibrous sheaths. Petioles 2 ft. long, terete, grooved down the face; blade 3 ft. long, very deeply cordate at base, lanceolate, tapering to an acute apex: nervation pedate. Peduncle 2–3 ft. long, slightly angular or almost terete, greenish, tinged with red above, minutely white-speckled. Spathe 8 in. long, 2 in. broad, lanceolate, cordate, auricled at base, undulate rolled back, greenish tinged with red. Spadix shortly stalked, 12–14 in. long, purplish. Colombia.

Anthurium burfordiense. (*G. C.* 1889. vi. 700.) S. A garden hybrid very similar to *A. leodiense*, *A. carneum* &c.

Anthurium carneum. (*Gfl.* 1886, 246.) S. per. Hybrid between *A. andreanum* and *A. nymphæfolium*.

Anthurium carneum. (*R. H.* 1884, 101.) S. A garden hybrid between *A. ornatum* and *A. andreanum*.

Anthurium Chamberlaini. (*G. C.* 1888, iii. 462, 464-5, f. 66, 67; *Ill. H.* 1898. 73 t. 62.) S. L. large cordate 3 ft. long by 2 ft. broad, on petioles 3½–4 ft. long. Scape 1 ft. or more long. Spathe boat-shaped, erect, 8–9 in. long, 4 in. broad, pale dull puce-coloured outside, shining crimson inside. Spadix 6 in. long, ¾ in. thick, on a stalk about ½ in. long, dull red. Venezuela?

Anthurium Chantrieri. (*R. H.* 1884, 101.) S. A garden hybrid between *A. subsignatum* and *A. ornatum*.

Anthurium chantinianum. (*R. H.* 1889, 157.) S. A garden hybrid between *A. houllettianum* and *A. andreanum*.

Anthurium chelseiense. (*G. C.* 1886, xxiv. 650; *Bull Cat.* 1886, 7, f.) S. A garden hybrid between *A. Veitchii* and *A. andreanum*.

Anthurium colocasiæfolium. (*R. H.* 1879, 452, f. 90.) S. L. very large, long-stalked; spadix long-peduncled, caudiform, 1½ ft. or more in length. Tropical America.

Anthurium crassifolium. (*G. C.* 1883, xix. 10.) S. evergreen per., with long-stalked ovate lanceolate l., very stiff and thick, with a very short rigid mucro at the obtuse apex. Peduncle as long as the petioles, terete, green. Spathe reflexed, light green. Spadix sessile, dull green, 2 in. long.

Anthurium crombezianum. (*R. H.* 1894, 552, t.) S. A garden hybrid of which *A. scherzerianum* is one of the parents.

Anthurium cruentum. (*R. H.* 1886, 50.) S. A garden hybrid between *A. andreanum* and *A. Veitchii*.

Anthurium crystallinum variegatum. (*G. C.* 1893, xiii. 641.) S. A variety with large blotches of creamy white on the l.

Anthurium cymbiforme. (*G. C.* 1889, vi. 67.) S. per. Allied to *A. ornatum*, which it resembles in its cordate l. and large white spathes, with salmon-pink spadices. Colombia?

Anthurium Dechardi. (*Ill. H.* 1877, t. 269.) S. evergreen per. Petioles 6–12 in. long, vaginate, furrowed on the back; blade lanceolate, spreading, 6–12 in. long, 2½–5 in. broad, acute, mucronate, green. Scape overtopping the l., terete or sub-angular. Spathe ovate-acuminate, free, 3–4 in. long, white. Spadix 2–3 in. long, shortly stalked, pale yellow. [*Spathiphyllum cannæfolium*, Schott.] Colombia.

Anthurium dentatum. (*R. H.* 1884, 293, f. 71.) S. A garden hybrid between *A. fissum* and *A. leuconeurum*.

Anthurium desmetianum. (*Ill. H.* 1888, 47, t. 52.) S. Garden hybrid.

Anthurium devansayanum. (*R. H.* 1882, 289, f. 63.) S. A hybrid between *A. magnificum* and *A. galeottianum*.

Anthurium eburneum. (*Williams' Cat.* 1891, 24.) S. A garden hybrid between *A. andreanum* and *A. ornatum*.

Anthurium Eduardi. (*R. H.* 1884, 102.) S. A garden hybrid between *A. cristallinum* and *A. subsignatum*.

Anthurium elegans. (*Gfl.* t. 1112.) S. per., with large long-petioled pedate-radiate l., a long-peduncled erect lanceolate green spathe, and stipitate green or dark purple spadix. Colombia.

Anthurium excelsius. (*W. G.* 1890, 307, t.) S. A hybrid between *A. Veitchii* and *A. ornatum*.

Anthurium ferrierense. (*Fl. and P.* 1883, 10.) S. A garden hybrid between *A. andreanum* and *A. ornatum*.

Anthurium flavidum. (*G. C.* 1886, xxiv. 651; *Gfl.* 1886, 157.) S. evergreen. A tall-growing species, with cordate-ovate acuminate l., 10 to 14 in. long; scape 5 to 6 in. long; spathe spreading, pale yellowish or yellowish-green, oblong, abruptly cuspidate; spadix 1¾ to 3 in. long, sessile, pale violet-pink. Colombia.

Anthurium Frœbelii. (*Gfl.* 1886, 52.) S. A garden hybrid between *A. andreanum* and *A. ornatum*.

Anthurium gandavense. (*G. C.* 1893, xiii. 415.) S. A garden hybrid between *A. andreanum* and *A. Chantrieri*.

Anthurium Glaziovii. (*B. M.* t. 6833.) S. Like *A. acaule*, with large oblong-obovate deep green l. on sub-terete petioles channelled down the face; peduncle elongate; spathe about 7 in. long, and 1½ in. broad, green outside, deep purple within; spadix 6–7 in. long, violet-purple. Brazil.

Anthurium Goldringi. (*G. and F.* 1893, 269.) S. A garden hybrid between *A. andreanum* and *A. scherzerianum*.

Anthurium greyanum. (*G. and F.* v. 526.) S. A garden hybrid between *A. ornatum* and *A. andreanum*.

Anthurium Grusoni. (*Gfl.* 1889, 121, t. 1293.) S. Hybrid of *A. andreanum* and *A. lindenianum*.

Anthurium Gustavi. (*Gfl.* t. 1076; *B. M.* t. 7437.) S. per., with large cordate sub-obtuse long-petioled dark green l. Scape very short, about 1 in. long, stout: spathe erect, boat-shaped, acuminate, green, shorter than the stout sessile spadix. Colombia.

Anthurium hardyanum. (*R. H.* 1889, 157.) S. Garden hybrid between *A. andreanum* and *A. Eduardi*.

Anthurium Harrisii pulchrum. (*G. C.* 1880, xiv. 358.) S. A handsome plant, with variegated lanceolate-oblong l., and a deep crimson-purple spadix set off by a creamy white spathe. Brazil.

Anthurium Hollandi. (*G. and F.* 1893, 269.) S. A garden hybrid between *A. grande* and *A. ferrierense*.

Anthurium houlletianum. (*R. H.* 1884, 101.) S. A garden hybrid between *A. magnificum* and *A. andreanum*.

Anthurium inconspicuum. (*G. C.* 1885, xxiii. 787.) S. L. 9–12 in. long, 1½–3 in. broad, narrowly elongate, elliptic, acute at both ends. Scape as long as the petioles (6–9 in.) Spathe 1 in. long, green. Spadix as long as the spathe, dark violet-brown. Brazil.

Anthurium intermedium. (*Bull Cat.* 1884, 11.) S. A garden hybrid between *A. hybridum* and *A. cristallinum*.

Anthurium isarense. (*R. H.* 1888, 423.) S. Garden hybrid.

Anthurium Kalbreyeri. (*G. C.* 1881, xvi. 116.) S. epiphyte with large digitate deep green l. Leaflets about 9, oblong, cuspidate; margins repand, undulate. Colombia.

Anthurium Kellermanni. (*H. G.* 1888, 49.) S. Garden hybrid.

Anthurium Kellermanni. (*Jard.* 1893, 43, f. 15.) S. L. light green, large, sagittate, with a broad open rounded sinus; auricles broad, very obtuse; a few large teeth on the margins. Spathe small, shorter than the spadix; fl. small, greenish.

Anthurium Kolbii. (*Gfl.* 1889, 121, t. 1293.) S. Hybrid of *A. andreanum* and *A. lindenianum*.

Anthurium Laingi. (*W. G.* 1888, 383.) S. Garden origin.

Anthurium lawrenceanum. (*R.H.* 1888, 12, t.) S. Garden hybrid.

Anthurium Lawrenciæ. (*G.C.* 1892, xi. 731.) S. Garden hybrid.

Anthurium longipes. (*G. C.* 1882, xviii. 297.) S. per. with slow-growing stout stem, creeping underground, and erect long-stalked narrow oblong l., 11–18 in. long, and 2–3¼ in. broad. Peduncle 2 ft. high. Spathe lanceolate, green, reflexed. Spadix shortly stipitate, yellowish. Brazil.

Anthurium longispathum. (*R.H.* 1888, 498; *W.G.* 1888, 467.) S. An acaulescent species. L. on long petioles: the blade 2 ft. long by 18 in. broad, thick and coriaceous, deeply cordate at the base, pale green: the veins very prominent beneath. Peduncle terete, grooved, stout, 3 ft. long. Spathe 15 in. long. Spadix very stout, cylindric, 2 ft. long. Guadeloupe.

Anthurium macrolobum. (*Bull Cat.* 1883, 11; *Fl. and P.* 1883, 75.) S. A garden hybrid between *A. leuconeurum* and *A. pedatoradiatum*.

Anthurium mooreanum. (*G.C.* 1886, xxvi. 230, 497.) S. A garden hybrid between *A. crystallinum* and *A. subsignatum*.

Anthurium mortfontanense. (*R. H.* 1885, 282; 1886, 50, 156, tt.) S. A garden hybrid between *A. andreanum* and *A. Veitchii*.

Anthurium Ortgiesii. (*Gfl.* 1889, 121, t. 1293.) S. Hybrid of *A. andreanum* and *A. lindenianum*.

Anthurium Paradisæ. (*Williams' Cat.* 1891, 24.) S. A garden hybrid between *A. andreanum* and *A. ornatum*.

Anthurium parvum. (*G.C.* 1881, xiv. 588.) S. evergreen per. A species of small size, with ovate acute l., often cordate at base, and small purple-brown spathes and spadices. Rio de Janeiro.

Anthurium pumilum. (*G. C.* 1896, xix. 401.) S. A garden seedling or hybrid; parentage not stated.

Anthurium punctatum. (*G. C.* 1886, xxvi. 809.) S. per. in the way of *A. Harrisii* and *A. Bakeri*. Petioles 6–8 in. long, acutely channelled down the face, keeled or rounded on the back: blade 14–20 in. long, 2¾–4½ in. broad, elongate-oblong, somewhat abruptly acute, cuneate at base, bright dark green above, paler with blackish dots beneath. Peduncle 12–18 in. long, terete. Spathe spreading or reflexed, 3½–4½ in. long, linear-oblong, cuspidate-acuminate, reddish above, green beneath, changing to greyish-green or purplish-green, margins revolute. Spadix 6–9 in. long, slightly tapering, olive-green. Ecuador.

Anthurium purpureum. (*G.C.* 1887, i. 575.) S. evergreen per. with ascending stem. Petioles 3–6 in. long, rounded on the back with a broad shallow channel down the face: the blade is 12–16 in. long, 3–3¾ in. broad, oblong-lanceolate, acute, cuneate-acute at the base. Peduncle 1 ft. long. Spathe spreading or reflexed, 4½ in. long, 1 in. broad, purple on both sides, with a green base. Spadix 6 in. long, slightly tapering, rich violet-purple. Brazil.

Anthurium ridolfianum album, (*B.T.O.* 1891, 244, t. 8.) S. A garden hybrid.

Anthurium rosæflorum. (*G.C.* 1892, xi. 731.) Name only.

Anthurium roseum. (*B.T.O.* 1888, 99.) S. Garden hybrid.

Anthurium rotundispathum. (*Ill. H.* 1891, t. 119.) S. A garden hybrid between *A. andreanum* and *A. lindenianum*.

Anthurium salmoneum. (*Ill. H.* 1895, t. 42.) S. A garden hybrid between *A. lindenianum* and *A. andreanum*.

Anthurium sanderianum. (*G. C.* 1895, xvii. 594.) S. A seedling var. related to *A. andreanum*, with a large shield-shaped foliaceous spathe.

Anthurium Saundersii. (*B. M.* t. 6218.) S. per. with a slender climbing stem. L. digitate, on slender petioles 6–8 in. long; leaflets about 8, 8–10 in. long, very narrow, linear-lanceolate, attenuate. Peduncle 1–2 in. long. Spathe 2 in. long, lanceolate, attenuate, pale green. Spadix sessile, stout, about as long as the spathe, greyish-green, becoming purplish. Brazil?

Anthurium scherzerianum Adriani. (*Ill. H.* 1878, t. 351.) S. per. A large-spathed richly coloured variety.

—— Var. **albo-lineatum.** (*W. G.* 1888. 278.) S.

—— Var. **andegavense.** (*R. H.* 1881, 272.) S. Something like var. *rothschildianum*, having the scape dotted with violet, and the spathe white beneath dotted with red, scarlet above dusted with white.

Anthurium scherzerianum atrosanguineum. (*W. G.* 1889, 113.) S.

—— Var. **bispathaceum.** (*Ill. H.* 1890, 67, t. 107.) S. A curious form with two red spathes placed opposite each other.

—— Var. **bruxellense.** (*Ill. H.* 1887, 51, t. 18.) S.

—— Var. **compactum.** (*G. C.* 1895, xvii. 467; *G. M.* 1895, 244, f.) S. Spathe almost circular, white, thickly covered with blotches of coral-red.

—— Var. **Hendersoni.** (*F. M.* t. 468.) S. A var. with very large elliptic crimson-coloured spathes.

—— Var. **lacteum.** (*Ill. H.* 1886, t. 607.) S. A white-spathed form.

—— Var. **maximum.** (*Bull Cat.* 1881, 7, 15.) S. A large scarlet-spathed form.

—— Var. **maximum album.** (*Ill. H.* 1890, 29, t. 100.) S. A seedling var. with large white spathes.

—— Var. **nebulosum.** (*R. H.* 1888, 146.) S. Garden var., with double white spathes dusted with red.

—— Var. **nigricans.** (*W. G.* 1889, 113.) S.

—— Var. **parisiense.** (*R. H.* 1887, 144: *Ill. H.* 1887, 47, t. 16.) S.

—— Var. **roseum.** (*Bull Cat.* 1893, 9.) S. A var. with salmon-rose-coloured spathes.

—— Var. **rotundiflorum.** (*W. G.* 1889, 113.) S.

—— Var. **sanguineum.** (*W. G.* 1889, 113.) S.

—— Var. **Wardii.** (*Veitch Cat.* 1879, 28.) S. A var. with broad foliage, and spathes 6 in. long by 4 in. broad.

—— Var. **warocqueanum.** (*Ill. H.* 1888, 43, t. 51; and *H. G.* 1888, 400.) S. This has white spathes spotted with red, and does not appear to be distinct from the var. *rothschildianum*.

Anthurium spathiphyllum. (*G. C.* 1877, vii. 652.) S. evergreen per. Stemless. Petiole 3–6 in. long, triangular; l.-blade 16–24 in. long, 1¾–2¼ in. broad, narrow lanceolate, attenuate-cuneate from middle to base, apex acuminate, bright green; midrib prominent on both sides, rounded above, triangular-acute beneath. Peduncle 7–10 in. long, triangular, green. Spathe white, about 1¾ in. long, 1–1¼ in. broad, erect, deeply hooded or boat-shaped, broadly ovate: apex shortly acuminate. Spadix pale yellow, 1 in. long, slightly clavate. Tropical America.

Anthurium splendidum. (*G. C.* 1883, xix. 381, f. 58; *Fl. and P.* 1883, 53; *Bull Cat.* 1883, 11, t. 3.) S. per. foliage plant, with cordate bullate l., of a beautiful sea-green colour. Colombia.

Anthurium subulatum. (*G. C.* 1886, xxvi. 230.) S Caudex short; l. dark green, elongate, cordate-ovate, cuspidate-acuminate at the apex; peduncle 9 to 12 in. long, bearing a stout purple-red spadix, and a spreading oblong white spathe, ending in a long subulate point. Colombia.

Anthurium trifidum. (*B. M.* t. 6339.) S. per. Stem very short. Petioles slender, nearly terete, slightly flattened on the face, reddish-brown; lamina 10–15 in. long, deeply 3-lobed; lateral lobes falciform-oblong, obtuse, shorter than the oblong lanceolate acuminate middle lobe. Peduncle slender, erect, shorter than the petioles, reddish-brown. Spathe reflexed, linear-oblong, shorter than the slender shortly stipitate spadix, both reddish-brown. Tropical America (?)

Anthurium trilobum. (*Ill. H.* 1878, t. 283.) S. This is probably identical with *A. trifidum*; it has the same form of l., but the infl. is unknown. Colombia.

Anthurium triumphans. (*Bull Cat.* 1883, 11; *Fl. and P.* 1883, 75.) S. per. foliage-plant with erect stem, terete or quadrangular petioles, and elongate cordate bright green l. Peduncle quadrangular, spathe narrow, green: spadix stout, greenish-white. Brazil.

Anthurium triumphans. (*G. C.* 1896, xix. 650.) S. A garden hybrid with pink spathe and yellow spadix.

Anthurium Veitchii. (*G. C.* 1877, vi. 772, f. 142, 143; *B. M.* t. 6968.) S. per. Stemless. Petioles terete, 2–3 ft. long; blade about 2 ft. long, ovate-oblong, acute, attached in a peltate manner near the base; base cordate; midrib on the upper surface rounded near the base, depressed near the apex, on the lower surface wide and flattened along the basal half, prominent and angled in the apical half; lateral nerves arched, depressed, acutely prominent on the lower surface. Peduncle ¼–½ as long as petiole, whitish. Spathe spreading, oblong with a long subulate point, white, many-nerved. Spadix 2–2½ in. long, whitish or pink. Colombia.

—— Var. **acuminatum.** (*G. C.* 1885, xxiv. 650; *Gn.* 1886, 147.) S. L. ovate-lanceolate, acuminate. Colombia.

Anthurium vervæneum. (*R. H.* 1884, 204 t.) S. A white-spathed variety of *A. scherzerianum*.

Anthurium Walujewi. (*Gn.* t. 1004.) S. Allied to *A. magnificum*. Petiole 4–5 angled. Lamina broadly cordate, 12–14 in. long, 8–10 in. broad, olive-green. Scape shorter than the petioles, dorsally keeled. Spathe lanceolate, recurved, green, about as long as the terete obtuse spadix. Venezuela.

Anthurium wambekeanum. (*Ill. H.* 1895, 185; *G. C.* 1893, xiv. 557, f.) S. A garden hybrid between *A. lindenianum* and *A. andreanum*.

Anthurium warocqueanum. (*Fl. and P.* 1878, 101; *Ill. H.* 1880, t. 392.) S. Foliage plant, in the way of *A. Veitchii*, with l. similar in shape and size, but not bullate, of a rich deep green, with a velvety lustre and pale veins. Colombia.

Anthurium Wittmackii. (*Gn.* 1889, 121, t. 1293.) S. Hybrid of *A. andreanum* and *A. lindenianum*.

Antigonon insigne. (*G. C.* 1877, vii. 780, 789, f. 126.) Polygonaceæ. S. climber. Stems slender, angular, pubescent. L. 4 in long, 3 in. broad, on short downy stalks, broadly cordate-ovate; apex shortly acuminate, puberulous above, downy beneath. Fl. very numerous, in tufts along the sides of long panicles, which end in branched tendrils; calyx of 5 membranous rosy-pink segments, the 3

outer 1 in. long and nearly as broad, cordate-orbicular, apiculate, the 2 inner much narrower, falcate, lanceolate, apiculate. Stamens 8, unequal, united in a short tube at the base, surrounding the 3-cornered ovary. Styles 3. Colombia.

Antigonon leptopus albiflorum. (*W. G.* 1888, 472.) S. climber. A white-flowered variety.

Antigramma braziliensis. (*Bull Cat.* 1881, 15.) Filices. S. fern with simple oblong-lanceolate fronds of an opaque glaucous green colour, remarkable in the young plants for having a silver-grey band along each side of the midrib. Brazil.

Antirrhinum hispanicum. (*B. M.* t. 6391.) Scrophulariaceæ. H. herb, 1 ft. high, covered with glandular hairs. L. alternate or opposite, spreading, recurved, elliptic, ovate-oblong or lanceolate, acute or obtuse, 4–10 lin. long. Fl. in a terminal raceme, rather large, pale purplish-rose with a yellow palate. Also grown as *A. rupestre*. Spain.

Antirrhinum nuttallianum. (*Gfl.* 1888, 331, t. 1275, f. 3; *G. C.* 1888, iii. 806; *H. G.* 1888, 371.) H. H. A rather slender branching plant 1–2 ft. high, softly pubescent and viscid. L. ovate, the lower about 1 in. long, the upper smaller and nearly sessile. Fl. axillary, stalked, purple, the tube of the corolla not longer than the spreading lips. California.

Anubias heterophylla. (*G. C.* 1889, vi. 67.) Araceæ. S. per. L. about 1 ft. long by 3 in. broad, bright green, blotched with dull yellow; fl. small, not showy. Congo.

Aphærema spicata. (*B. M.* t. 7398.) Samydaceæ. S. Small shr. with opposite ovate cordate serrated l., and small, golden yellow fl. in terminal slender erect racemes. South Brazil.

Aphelandra amœna. (*Bull Cat.* 1888, 7: *L'Hort. Int. Cat.* 1888-9, 17.) Acanthaceæ. S. shr. with ovate acuminate l., of a deep green, variegated with grey along the course of the midrib and veins. [*A. blanchetiana*, Hook. f., *B. M.* t. 7179.] Brazil.

Aphelandra atrovirens. (*Ill. H.* 1884, t. 527.) S. A small species, with elliptic-ovate blackish-green shining l., and a sub-cylindric spike of crowded small yellow fl. with green bracts. Bahia, Brazil.

Aphelandra chrysops. (*Bull Cat.* 1887, 7–9; *G. C.* 1887, i. 736, 140.) S. This is the same as *A. squarrosa*, var. *Leopoldi*, Van Houtte.

Aphelandra dubia. (*Ill. H.* 1894, 233, t. 15.) S. A garden hybrid between *Aphelandra nitens Sinitzini* and *Stenandrium Lindeni*.

Aphelandra macedouiana. (*Ill. H.* 1886, t. 583: *Cat. Comp. Cont. d'Hort.* 1886, 6.) S. per. Dwarf, with horizontally spreading elliptic-oblong acute l., dark green above, with the nerves picked out in whitish green, violet-purple beneath. Brazil.

Aphelandra Margaritæ. (*B. H.* 1883, 315, t. 19; *G. C.* 1887, ii. 585, f. 114.) S. soft-wooded per. A plant of dwarf habit, with hairy stem and l., which latter are lanceolate, acute, dark green above, with a stripe of white along the course of the veins, dark rose-purple beneath. Fl.-spikes short, dense; bracts spinose-toothed at the margins, ciliate; corolla 2 in. long, bright orange.

Aphelandra nitens Sinitzini. (*Ill. H.* 1876, t. 231: *Lind. Cat.* 1876, 3.) S. per. herb. L. large, elliptic-ovate, acute, purple-red below, dark green above, with the midrib purple-brown, margined, as are also the lateral veins, with whitish-green. Fl. in an erect dense bracteate spike, scarlet; bracts red. E. Peru.

Aphelandra pumila. (*Bull Cat.* 1878, 4; *B. M.* t. 6467.) S. herb of dwarf habit. L. oblong-ovate, bright green, with a broad central band of lighter yellowish green. Fl. cinnabar-red, in short ovate bracteate terminal spikes; bracts dark brown, hairy, bluntly ovate, much shorter than the corolla. Brazil.

—— Var. **splendens.** (*Gfl.* t. 1104.) S. A pretty form differing from the type in having acute green bracts.

Aphelandra punctata. (*Bull Cat.* 1881, 5, 15.) S. L. elliptic-lanceolate, acuminate, green, with a feathered whitish central band which breaks up into small dots on its margin. Fl.-spike elongate: bracts elliptic, acuminate, serrate, recurved, bright yellow with green tips. Fl. tubular, 5-lobed, bright yellow. [*A. chamissoniana*, Hook. f.; *B. M.* t. 6627.] South America.

Aphelandra tetragona imperialis. (*Gfl.* 1891, 449, t. 1354.) S. shr. A variety with ovate acute green l. and terminal spikes of showy scarlet red fl. four times as long as the small brownish bracts. Central America.

Apodolirion Ettæ. (*G. and F.* 1894, 424.) Amaryllidaceæ. G. An ally of *Cooperia*, having tunicated bulbs and l. and fl. like those of *Crocus*. Fl. white and rose. South Africa.

Aponogeton distachyum roseum. (*R. H.* 1885, 508.) Naiadaceæ, H. aquatic. Var. with rosy tinted flowers.

Aponogeton Lagrangei. (*R. H.* 1895, 380, t.) H. A form of *A. distachyum* with white and rosy flesh-coloured bracts flushed with green at the base.

Aponogeton spathaceum junceum. (*B. M.* t. 6399.) H. A water plant with erect rush-like l., 6–8 in. long, and a bifid infl. similar to *A. distachyum*, but smaller and with pinkish bracts. South Africa.

Appendicula peyeriana. (*G. C.* 1891, x. 669.) Orchidaceæ. S. Like a small *Dendrobium* with long slender pseudo-bulbs and small white flowers. Sumatra.

Aquilegia atrata. (*W. G.* 1890, 161.) Ranunculaceæ. H. A form of *A. vulgaris* with dark violet fl. Germany.

Aquilegia californica hybrida. (*F. M.* t. 278.) H. per. A large-flowered hybrid, raised between *A. californica* and *A. chrysantha*, with scarlet sep. and bright yellow long-spurred pet.; the spur scarlet with a yellow tip.

Aquilegia cœruleo-chrysantha. (*W. G.* 1889, 292.) H. Garden hybrid.

Aquilegia flabellata, var. (*R. H. B.* 1889, 157, t.) H. A pretty var., with white fl.

Aquilegia flabellata. (*R. H.* 1887, 548, f. 110.) H. Garden variety. A plant quite distinct from the true *A. flabellata*, Sieb. et Zucc.

—— Var. **nana, flore albo.** (*B. T. O.* 1888, 118, f. 17.) Garden variety.

Aquilegia formosa. (*B. M.* t. 6552.) H. herb. per. Much like *A. canadensis*, but with larger more open longer-spurred fl., golden yellow, with the margins of the sep. and spurs bright red, or in var. *flavescens* entirely yellow. California.

Aquilegia longissima. (*G. and F.* 1888, 31, f. 6, 90.) H. per. A columbine of tall habit, allied to *A. chrysantha*: slightly pubescent, with silky hairs. L. glaucous beneath. Fl. pale yellow, or straw colour, or nearly white or tinged with red: spurs 4 in. or more long. Texas and Mexico.

Aquilegia olympica. (*R. H.* 1880, 120.) H. herbaceous per. about 1½ ft. high. L. numerous, radical. Fl. large, delicate mauve-blue. Spurs stout, short, obtuse.

Aquilegia oxysepala. (*W. G.* 1890, 208.) H. Much like *A. vulgaris*, but with larger l., and the sep. very narrow and very acute. Also known as *A. oxypetala*. Siberia.

Aquilegia Stuarti. (*R. H.* 1888, 539 *H. G.* 1888, 552.) Garden hybrid.

Aquilegia thalictrifolia. (*Gfl.* t. 961. f. 1.) H. per. herb, with light green foliage and deep blue fl. Petioles reddish-brown, 3-branched, each branch with a tripartite leaflet, the segments of which are cuneate-oblong, obtuse, crenate. Fl. laxly racemose: spurs short and straight. Tyrol.

Aquilegia transsilvanica. (*G. C.* 1892, xi. 650.) H. per. 1–2 ft. high, branching, and quite glabrous. L. biternate: segments 2–3-fid. Fl. 2–3 in. in diam. bright purplish-blue. [The correct name for this is *A. glandulosa*, Fisch.] Transylvania.

Arachnanthe Lowii rohdeniana. (*Veitch Man. Orch. Phalæn.* 10.) Orchidaceæ. S. A dwarf form with shorter and narrower l. and brighter coloured fl., the four lower yellow ones being separated from the rest by an interval of 9–12 in. Borneo.

Aralia cachemirica (printed *cashimerica*). (*G. and F.* 1888, 320; *W. G.* 1888, 436.) Araliaceæ. H. herb. per., growing 6 ft. high, with very large compound l., the leaflets being 4–5 in. long, acuminate, hispidulous and serrate. The umbels of white fl. are disposed in a narrow terminal raceme 3–4 ft. long. [This is the same as *A. macrophylla*, Lindl. Both names were published in 1844.] Cashmere.

Aralia Chabrierii. (*Williams' Cat.* 1882, 24, f. 17 ; *R. H. B.* 1887, 20, f.) S. shr. L. 1 ft. long, pinnate ; leaflets opposite, linear, 6–9 in. long, deep green, with crimson midrib. [*Polyscias paniculata*, Baker.]

Aralia chinensis, foliis aureo-variegatis. (*M. G. Z.* 1896, 323.) H. A form with golden variegated l.

Aralia cochleata. (*Williams' Cat.* 1882, 24.) S. shr., very distinct, and of neat habit, with roundish deeply serrated light green l., 3 in. in diam. Stem and petioles marbled. Polynesia.

Aralia elegantissima. (*Ill. H.* 1876, 229 ; *Bull Cat.* 1876.) S. shr. or small tree of graceful habit, with a slender erect trunk, bearing a crown of long-petioled digitate l., and small white fl. in cymes. Leaflets 6 or 7, linear-lanceolate, coarsely dentate, dark green above ; the mid-rib, apex, tips of the teeth and under surface purplish. Common petiole and petioles of leaflets yellowish, spotted with dark green. New Caledonia.

Aralia filicifolia. (*Bull Cat.* 1877, 3, f. 3 ; *Williams' Cat.* 1877, 18, 9.) S. shr. of graceful habit with ornamental foliage. Stem and petioles purplish with white spots. L. pinnate ; leaflets pinnatifid, bright green with purplish midribs. This plant, which has also been exhibited as *A. spectabilis*, is certainly not an *Aralia*, and possibly belongs to a different natural order. South Sea Islands.

Aralia gemma. (*Ill. H.* 1883, t. 477.) S. shr. of ornamental character, with bipinnate l., the pinnules with small lateral leaflets and a large terminal one, all irregularly lobed or toothed, olive green above, greyish violet beneath when young. New Caledonia.

Aralia gracillima. (*Bull Cat.* 1876, 3.) S. shr. of graceful habit. Stem erect. L. closely set, spreading, linear-lanceolate, acute, dark green ; midrib white, marked, where the principal lateral veins branch off, with a short white spur. South Sea Islands.

Aralia kerchoveana. (*G. C.* 1878, ix. 430.) S. shr. An Araliad of bold but neat habit, in the way of *A. elegantissima*, but with broader bolder l.-segments. L. palmatisect, with 10–12 linear-oblong segments, about 3 in. long, coarsely and irregularly toothed.

Aralia longipes. (*Bull Cat.* 1883, 12.) S. shr., with long-stalked, digitate l. : leaflets oblanceolate, acuminate. North Australia.

Aralia maculata. (*Bull Cat.* 1876, 3.) S. shr., with the erect stem and the petioles blackish purple, thickly dotted with green. L. pinnate, membranous, light green ; leaflets in about four pairs, broad, oblong, acuminate, rounded at base ; margins sharply spinulose, serrate. South Sea Islands.

Aralia monstrosa. (*Williams' Cat.* 1880, 13.) S. L. pendent, pinnate. Leaflets 3–7, elliptic, with irregularly laciniate margins : the surface blotched with grey, and the margins creamy-white. Polynesia.

Aralia nobilis. (*Williams' Cat.* 1882, 24.) S. shr. of bold habit, with oblong-ovate acuminate rugose undulated l., 15–20 in. long, 5–6 in. broad, light green marbled with darker green. Stem and petioles marbled and warted.

Aralia quercifolia. (*Williams' Cat.* 1881, 21, 30 ; *G. C.* 1881, xv. 785, f. 140.) S. shr. A neat free-growing plant. L. opposite, trifoliate : leaflets ovate, acuminate, deeply sinuate-pinnatifid, light shining green. New Britain.

Aralia quinquefolia gracilis. (*G. C.* 1882, xvii. 217.) G. shr. A seedling var. of slender habit, with long terete petioles and palmate blades of five linear remotely toothed segments.

Aralia Reginæ. (*Ill. H.* 1879, t. 337.) S. shr., much like *A. Veitchi*, with a smooth stem ; petioles variegated with rose and olive and marked with darker lenticels ; leaflets six, linear, acuminate, flat, not undulate, of a uniform green. New Caledonia.

Aralia rotunda. (*Bull Cat.* 1883, 12.) S. shr. of distinct character. Stem brownish-green spotted with paler colour when young. L. with one or three roundish toothed leaflets, the lateral ones smaller than the middle one. Polynesia.

Aralia sonchifolia. (*Lind. Cat.* 1878, 3.) S. shr., distinct and curious. L. somewhat like those of a *Sonchus*, deeply and irregularly cut, striped and coloured. Petioles and stems ivory-white dotted with black. New Caledonia.

Aralia spinulosa. (*Williams' Cat.* 1881. 18, 30.) S. shr. A foliage plant of bold robust habit with alternate pinnate l.; leaflets in 2–3 pairs with an odd one, oblong, acute, spinulose-toothed, dark green, the marginal teeth reddish. The stem and petioles are spotted and suffused with crimson.

Aralia Veitchi. (*Ill. H.* 1875, t. 225.) S. shr. with slender erect stem, and digitate l. Leaflets 10–14, linear, acute, dark green above, purplish brown beneath: margins undulate. New Caledonia.

Araucaria imbricata platifolia. (*G. C.* 1895, xvii. 468.) Coniferæ. H. A form with much broader l. than the type.

Araucaria Muelleri. (*Ill. H.* 1882, t. 449; *Lind. Cat.* 1882, 3.) S. A handsome species, with gracefully arching plume-like branches in whorls of three. L. imbricate, coriaceous, ovate, flattish, more or less keeled on the back. New Caledonia.

Araujia graveolens. (*G. C.* 1888, iv. 271, f. 33.) Asclepiadaceæ. S. [This is the plant known as *Schubertia grandiflora*, and S. *graveolens* or *Physianthus graveolens*, now referred to the genus *Araujia*.]

Arctostaphylos nevadensis. (*M. D. G.* 1896, 18.) Ericaceæ. H. A prostrate evergreen bush with ovate leathery l. and short racemes of reddish fl. California.

Arctotis leichtliniana. (*G. C.* 1885, xxiv. 38.) Compositæ. G. A shrubby species 3 ft. high, with furrowed stems clothed with a white tomentum. L. 2–8 in. long, obovate or oblanceolate, petioled, pinnatifid and toothed, not auricled or decurrent, tomentose beneath, cobwebbed above. Fl.-heads 2½ in. in diam.; ray golden yellow with dark basal mark. [This is figured in *B. M.* t. 6835, upper figure, as *A. aureola*.] South Africa.

Arctotis revoluta. (*B. M.* t. 6835, lower fig.) G. shrubby species, clothed on the stem and under side of the pinnatisect l. with a cottony tomentum. Heads 2 in. diam.; ray bright yellow, with dark blotch at the base of each floret; disc also dark. South Africa.

Ardisia capitata. (*Gfl.* 1887, 70.) Myrsinaceæ. S. shr. L. crowded at the apex of the thick branches, 1 ft. or more long, obovate-spathulate, entire, shortly stalked. Peduncles axillary, compressed, bearing a cone-like head of greenish white fl., succeeded by bright red berries. Fiji.

Ardisia mamillata. (*G. C.* 1887. ii. 810, 809, f. 154.) S. shr. of dwarf compact habit, hairy. L. shortly stalked, oblong, about 4 in. long, by 1½–2 in. broad, of a dark green, papillate above. Fl. white, tinged with rose, umbellate, on axillary peduncles 2 in. long. Berries as large as a pea, brilliant rose-red. China.

Ardisia metallica. (*Ill. H.* 1881, t. 421). S. shr., very dwarf and almost unique in the coloration of its l. The plant is about 6–10 in. high, very leafy. L. lanceolate-oblong, obtuse, dentate, 4–5 in. long, 1¾–2¼ in. broad, of a shining deep bronzy-green, with brilliant violet reflections. Fl. pink, in small axillary clusters, succeeded by rosy-purple berries. Sumatra.

Ardisia Oliveri. (*G. C.* 1877, viii. 680; *B. M.* t. 6357.) S. A glabrous shr., with reflexed oblanceolate-acuminate l., 5–7 in. long, faintly toothed, gland-dotted. Fl. in large terminal corymbs 4–5 in. in diam.; corolla, pedicels, peduncles, and bracts all bright lilac-purple. Costa Rica.

Ardisia picta. (*Bull Cat.* 1885, 13, 8, f.) S. shr. An ornamental foliage plant with lanceolate acute l., crenate at the margin, of a dark velvety bronze green, with a broad central feathered silvery stripe. Brazil.

Areca flava. (*Williams' Cat.* 1877, 18.) Palmæ. S. palm, with orangey-ellow stem and petioles, and pinnate pale green l. Madagascar.

Areca Micholitzii. (*Sand. Cat.* 1895, 46.) S. Stems attaining a height of 9 ft. L. large, sparsely divided. New Guinea.

Areca purpurea. (*Ill. H.* 1877, t. 298; *Williams' Cat.* 1877, 18.) S. palm with smooth purple-red petiole and rhachis; blade elliptic, pinnate; pinnæ numerous, linear-lanceolate, acuminate, 1½ in. broad, bright green. Mauritius.

Arenaria Huteri. (*J. of H.* 1894, xxix. 369, f. 57.) Caryophyllaceæ. H. A plant of neat habit, with large pure white flowers. Tyrol.

Arenga Engleri. (*K. B.* 1895, 19.) Palmæ. S. 5 ft. high, with fronds bearing numerous pinnæ 16 in. long, dark green above, silvery below: spadices much branched; fruit subglobose, ½ in. in diameter; fl. said to be very fragrant. **Formosa.**

Arenga Wightii. (*Bull Cat.* 1882, 13.) S. palm, with dwarf stem and pinnate l., with alternate linear leaflets and smooth petioles. In young plants the l. are at first simple, cuneate, with the upper edges erose. As the plant develops they gradually become pinnate. **South India.**

Argemone hispida. (*B. M.* t. 6402.) Papaveraceæ. H. H. annual, very similar to *A. mexicana*, but more hispid and with white fl. Colorado: California.

Argylia canescens. (*B. M.* t. 7414.) Bignoniaceæ. G. Stem fleshy, 9 in. long and 3 in. wide, producing annually flowering stems 18 in. high, bearing alternate l. resembling those of the carrot, and a terminal cluster of tubular fl. 1 in. long, and 1½ in. across; colour bright yellow, with red streaks in the throat. Chili.

Aria Hostii. (*R. H.* 1877, 210.) **Rosaceæ. H. tree or shrub, much in** the way of *Pyrus Aria*, with broad elliptic obtuse often lobate l. with serrate margins. Fl. in large terminal corymbs, rosy-pink. Also known as *Crataegus Hostii*.

Arisæma anomalum. (*G. C.* 1890, vii. 321: *B. M.* t. 7211.) Araceæ. S. A small species, remarkable in having an Iris-like rhizome and in being evergreen. L. 9 in. high, green, with 3–5 lanceolate leaflets. Scape 9 in. high; spathe small, coloured greenish-white and brown. Perak.

Arisæma enneaphyllum. (*Gfl.* 1891, 578, f. 103.) G. The plant figured at the place quoted appears to be *A. flavum*, Schott, and not the true *A. enneaphyllum*, Hochst. It is a dwarf species with pedatisect l. with 5–7 leaflets. The spathe is yellow, with the limb bent forward; spadix short, clavate. **Arabia.**

Arisæma fimbriatum. (*G. C.* 1884, xxii. 680, 689, f. 119; *B. M.* t. 7150; *Bull Cat.* 1885, 13, 7, f.) S. tuber. L. trifoliate, having elliptic-acuminate segments. Peduncles slender; spathe 6 in. long, with a very short tube, and an erect broadly lanceolate-acuminate brownish-purple limb, striped with white. Spadix longer than the spathe, the long barren part covered with hair-like filaments and pendulous. **Philippine Islands (?).**

Arisæma galeatum. (*G. C.* 1879, xii. 102; *B. M.* t. 6457.) G. tuber. A singular species in leaf like *A. speciosum*, and with a spathe shaped something like that of *A. praecox*, having a galeate limb with a pendent terminal lobe, green ribbed with white. **Spadix very much longer than** spathe, ending in a long pendulous thread-like apex. Sikkim.

Arisæma Giraldii. (*B. T. O.* 1893, t. 12.) This is *A. consanguineum*, Schott, a plant allied to *A. erubescens*. China.

Arisæma Griffithii. (*B. M.* t. 6491.) G. L. resembling those of *A. speciosum*. Scape ⅓ as long as the petiole. Spathe with an enormously developed limb 6–10 in. broad, arched over the mouth of the tube, the sides spreading out into broad lateral wings; the whole is of a violet-brown colour beautifully **ribbed and reticulate with green.** Spadix ending **in a long filiform** brown-violet appendix. Sikkim Himalaya.

Arisæma nepenthoides. (*B. M.* t. 6446.) G. per. tuber. Two l. to a plant; the petioles and scape pale brownish, transversely barred with red-purple; leaflets 5, digitate, oblanceolate, acuminate, dark green with paler margins. Spathe 5–6 in. long: tube rather slender, with broad recurving auricles at its top; limb oblong, acuminate, arching, yellowish brown, lined and spotted with brown; auricles green with broad brown borders and dark spots; spadix with a straight obtuse appendix, much shorter than the spathe. Eastern Himalaya.

Arisæma utile. (*B. M.* t. 6474.) G. tuberous per. L. two to a root. Petiole 1 ft. long, green, unspotted. Leaflets 3, green, with purplish veins; margins wrinkled. Scape much shorter than the petiole. Spathe red-brown with greenish ribs, the very broad emarginate limb strongly arched over the mouth of the tube. Spadix terminating in a long filiform purple-brown appendix, that hangs down and **reaches the ground. Sikkim Himalaya.**

Arisæma Wrayi. (*G. C.* 1889, v. 136; *B. M.* t. 7105.) S. A well-marked species with l. 9–18 in. high, the petioles green, mottled with reddish-brown; peduncles erect, 1–2 ft. long, each bearing a green and white spathe something like *A. ungenthoides* in size and shape. Perak.

Arisarum proboscideum. (*B. M.* t. 6634.) Araceæ. G. per., with creeping rhizome, sagittate green l., and short peduncled spathes, the apex of which is produced in a very long tail that rather abruptly curves upwards; lower half of spathe greyish-white, upper half olive-green and olive-purple. South Italy.

Aristea platycaulis. (*G. C.* 1887, i. 732.) Iridaceæ. G. A well-marked species, having a flat stem nearly as broad as the ensiform l., which grow to 1 ft. in length and 1 in. in breadth. Fl. in dense clusters, on short pedicels, blue. Pondoland.

Aristolochia altissima. (*B. M.* t. 6586.) Aristolochiaceæ. G. climber, with cordate acute l. 2–2½ in. long, and small-sized yellow-brown fl. striped with darker brown. Sicily; Algeria.

Aristolochia clypeata. (*G. C.* 1892, xi. 435, f. 61; *B. M.* t. 7512.) S. A handsome species allied to *A. Duchartrei*, with large cream-yellow fl., blotched and lined with purple. L. large, ovate, green. It is similar to *A. gigantea*. Brazil.

Aristolochia dammeriana. (*G. C.* 1895, xvii. 152.) S. It is a climber with foliage like that of *A. maxima*. The old stems are covered with corky bark. Central America.

Aristolochia elegans. (*G. C.* 1885, xxiv. 301, f. 64; *B. M.* t. 6909.) S. climber. An elegant species, flowering in the young state on the young shoots. L. broader than long, cordate, obtuse, glabrous: fls. on long stalks, the tube suddenly bent upwards and dilated at the mouth into a cordate ovate cup-shaped limb 2½ in. long by 2 in. broad, cream-coloured, with irregular dark purplish-brown markings. South Brazil.

Aristolochia Gigas Sturtevantii. (*G. and F.* 1891, 546; *G. C.* 1896, xix. 73, f.) S. A very large-flowered variety. Guatemala.

Aristolochia hians. (*G. C.* 1887, i. 40; *B. M.* t. 7073.) S. climber, very similar to *A. brasiliensis* in foliage and form of fl., but the beak of the fl. is much longer than the broad reniform lobe, which is smaller than that of *A. brasiliensis*. Outside of fl. bronzy-green, with the veins and margin of beak yellowish green; inside of the broad lobe dull yellowish-green, veined and spotted with purple-brown. Venezuela.

Aristolochia longicaudata. (*G. C.* 1890, viii. 493, f. 98.) S. A robust climber with the habit and l. of *A. brasiliensis*, and large fl. It is a handsome species of the unilabiate group, in which the solitary lip of the flower is prolonged into a very long tail. Colour creamy-white with purple veins. British Guiana.

Aristolochia longifolia. (*B. M.* t. 6884.) S. An interesting species, with short woody rootstock, long climbing stems, long-linear-lanceolate acuminate l., and good-sized purple-brown fl., the tube being yellowish, with dull purplish veins outside, and abruptly bent upon itself; the limb is roundish, about 2½ in. in diam., and has the lower part bent up as if pinched in the middle. Hong-Kong.

Aristolochia promissa. (*G. C.* 1879, ii. 494.) S. [The plant in cultivation, alluded to at the place quoted, is found not to be the true species.] Victoria. West Africa.

Aristolochia ridicula. (*G. C.* 1886, xxvi. 360, 361, f. 73; *B. M.* t. 6934.) S. climber. A remarkable plant, with odd-looking fl. Stem, petioles, pedicels, and outside of the fl. covered with long spreading hairs. L. bright green, orbicular or orbicular-reniform, cordate at base, covered with short hairs. Fl. 3½ to 4½ in. long; the tube bent upon itself, the basal part inflated, dull white, with purple brown veins: the limb is shortly revolute, and prolonged from the upper part of the sides into two long lobes, reminding one of donkey's ears; they are tawny (or perhaps cream colour) covered with dark purple-brown dendritic markings, and sparsely clothed with clavate purple-brown hairs. Brazil.

Aristolochia Salpinx. (*G. C.* 1886, xxvi. 456, 457, f. 92.) S. climber. L. cordate-ovate acuminate, glabrous 4–6 in. long, 2½–3 in. broad. Fl. about

1½ in. long, inflated at base, then abruptly constricted and bent upwards in the form of a dorsally compressed trumpet-shaped tube, with an oblique mouth, outside cream-coloured with purple network of veins, inside lighter: the upper lip with a yellow central blotch and numerous purplish spots around it; the margin is slightly reflexed, marked with purple lines and a few short purple hairs. Paraguay.

Aristolochia Westlandi. (*B. M.* t. 7011; *G. C.* 1888, iii. 332, iv. 186; *H. G.* 1888, 459.) S. climber, very similar to *A. longifolia*, but with much larger fl. L. 6–10 in. long, narrow oblong-lanceolate, acuminate, cordate at base, glabrous above, pubescent beneath. Fl. pendent, peduncle 3–5 in. long, hairy; hairs brown. Perianth-tube bent on itself, limb roundish-ovate, about 6 in. long by 5 in. broad, greenish-yellow, reticulately veined with purple-brown. China.

Armeniaca davidiana. (*B. H.* 1879, 236, f. 46–48.) Rosaceæ. H. tree with long pendent branches, elliptic ovate acuminate serrate l., and fl. of a pale rose sometimes streaked with darker colour. [This is a *Prunus*.] China.

Armeria cæspitosa. (*Ill.* t. 1192, f. 2; *B. M.* t. 7596.) Plumbaginaceæ. H. per. An interesting little species, 1–2 in. high, with tufts of small linear recurving l., and small heads of pale lilac fl. Spain.

Armeria undulata. (*W. G.* 1888, 325.) H. per. Something like the common Thrift, but the outer l. are linear-lanceolate and wavy on the edges, the inner l being linear and entire. The fl. and bracts are white. Greece.

Arnebia cornuta. (*G. and F.* 1888, 6; *G. C.* 1890, vii. 52, f.) Boraginaceæ. H. annual, growing to 1½ ft. high, and 2 ft. in diam., with lanceolate dark green hairy l., and racemes of deep yellow fl., with five black spots at the base of the lobes, which change to brown and finally disappear. Affghanistan.

Arnebia macrothyrsa. (*W. G.* 1891, 128; *G. C.* 1891, ix. 148, 180.) H. per. A fine showy plant 12–18 in. high, with l. 4–7 in. long and a large head of yellow fl. Armenia.

Artanthe decurrens. (*Ill. H.* 1876, 239.) Piperaceæ. S. per. shr. of striking appearance. Stem erect, stout, pale mottled green, 7-angled, angles running out into the petiole and peduncle. L. large, nearly 1 ft. long, broadly elliptic, subcordate at base, obtuse or subacute at apex, intense green above; margins revolute; the midrib pale green, purplish-red beneath. [*Artanthe magnifica*, Hort.; *Piper decurrens*, C. DC.]

Artemisia frigida. (*M. D. G.* 1896, 25.) Compositæ. H. A small bush, herbaceous from a suffrutescent base, with finely cut silvery-grey l. North Asia: North-west America.

Artemisia tridentata. (*Späth Cat.* 1894–5.) H. A thick-growing bush with silvery persistent l. Western North America.

Arthropodium neo-caledonicum. (*B. M.* t. 6326.) Liliaceæ. S. herb, with tufted linear grass-like l., and lax panicles of racemose white fl.: stamens densely bearded in upper half. New Caledonia.

Artocarpus eburnea. (*Bull Cat.* 1878, 4.) Urticaceæ. S. shr. Stem stout, brownish-purple. L. 1 ft. long, 6 in. broad, somewhat cordate, obovate, shortly acuminate, dark green with white veins; petiole stout, terete, 3–6 in. long, dark brown. South Sea Islands.

Arum detruncatum. (*Damm. Cat.* 1889, 4, 5, f. 2; *W. G.* 1889, 401, f. 64; *H. G.* 1889, 509.) Araceæ. G. per., with large flat tubers, cordate-triangular l., and large shortly-stalked spathes, of a greenish-yellow, spotted with purple. Asia Minor.

Arum elongatum. (*G. C.* 1882, xviii. 298.) H. tuberous per., something like *A. maculatum*, but with more elongate l. Spathe green, stained with purple outside, blackish-purple inside: appendix of the spadix blackish. Crimea.

Arum Magdalenæ. (*B. T. O.* 1894, 227.) H. Nearly allied to *A. palæstinum*, but with a yellow spathe, marbled and spotted with purple. Palestine.

Arum modicense. (*B. T. O.* 1894, 227; *W. G.* 1896, 311, f.) H. A vigorous form of *A. italicum*. Sicily.

Arum sanctum. (*Damm. Cat.* 1889, 3, 5, f. 1.; *Gfl.* 1889, 655: H. H. per., with large flat tubers, large cordate-triangular l., and large long-stalked spathes of a velvety blackish-purple, with black spadix. Palestine.

Arum syriacum. (*Gfl.* 1891, 657, f. 124.) H. per. This seems to be the same as *Biarum carduchorum*. The tuber produces a small cluster of short spathulate-lanceolate l., from the centre of which arises a subsessile spathe 5–6 in. long, blackish-purple within, green spotted with purple outside; spadix slender, nearly as long as the spathe, blackish. Syria.

Arundina bambusæfolia. (*W. O. A.* iii. t. 139; *B. M.* t. 7284.) Orchidaceæ. S. A distinct-looking plant, with tall slender stems, linear acuminate l., and a short terminal few-flowered spike of *Lælia*-like fl., with pale mauve-purple sep. and pet., the latter with a darker central stripe, and a magenta-purple lip marked with whitish lines on the disk. India.

Arundina Philippii. (*G. and F.* 1895, 504.) S. A near ally of *A. bambusæfolia*, from which it differs in its narrower l. and smaller fl.: the latter are 1½ in. across, pale lavender with a blotch of crimson on the labellum.

Arundinaria Hindsii. (*G. C.* 1894, xv. 238.) Gramineæ. H. Bamboo with stems 6 ft. high; l. 8 in. by ½ in., semi-erect, dark green. [Syn. *Bambusa erecta* Hort. Native name "Kanzan Chiku."] Japan.

—— Var. **graminea.** (*G. C.* 1894, xv. 238.) Has shorter stems and narrower l. than the type. [*Bambusa graminea*, Hort.] Japan.

Arundinaria khasiana. (*Bull Cat.* 1881, 16.) S. In the way of *A. falcata*, differing in its violet-coloured stems and branches, and in the l. being quite smooth beneath. Khasia and Assam.

Arundinaria khasyana. (*G. C.* 1894, xv, 301.) H. This plant, which is not the same as the preceding, has since been described under the name of *Arundinaria nitida*.

Arundinella anomala. (*Gfl.* 1889, 167.) Gramineæ. H. grass of very dwarf habit. Japan.

Arundo madagascariensis. (*K. B.* 1893, 341.) Gramineæ. S. A tall reed. It grows from 10 ft. to 20 ft. high and bears feathery panicles similar to Pampas grass. Of wide distribution in Asia and Africa as well as Madagascar.

Asarum caudigerum. (*G. C.* 1890, vii. 422; *B.M.* t. 7126.) Aristolochiaceæ. G. A dwarf arum-like plant with cordate hairy green l., and short stalked green and brown fl., the three segments narrowed into tails an inch long. Southern China.

Asarum geophilum. (*G. C.* 1890, vii. 422; *B. M.* t. 7168.) G. L. cordate-orbicular, 2–4 in. across, green with white veins. Fl. resting on the ground, brown with white spots. South China.

Asarum macranthum. (*B. M.* t. 7022; *G. C.* 1888, iv. 416; *H. G.* 1888, 553.) G. per. of dwarf habit. L. all radical; petioles 5–6 in. long; blade 3–4 in. long, and nearly as broad, cordate-ovate, acute, green, clouded with yellowish green, pale beneath, with purplish venation. Fl. numerous, densely crowded at the base of the l., 2-2½ in. in diam., brownish, with 3 large wavy lobes and a raised border around the mouth of the pear-shaped tube. The fl. are strongly scented like Fenugreek. Formosa.

Asarum maximum. (*G. and F.* 1895, 133; *B. M.* t. 7456.) G. Rhizome creeping; l. cordate, 18 in. high, 8 in. broad, dark green mottled with grey, as in *Cyclamen*. Fl. on short stalks, fleshy, three-lobed, 2½ in. in diam., maroon-purple with a conspicuous eye-like blotch of white. China.

Asarum Thunbergii. (*Gfl.* t. 928.) G. This is the very curious plant which is better known as *Heterotropa asaroides*. Japan.

Asclepias atrosanguinea aurea. (*G. and F.* 1881, i. 356.) Asclepiadaceæ. G. An ornamental plant, which seems to be a variety of *A. curassavica*, with deep blood-red fl. having a yellow corona. Bolivia.

Asparagus albanensis. (*Ill. H.* 1895, 188.) Liliaceæ. S. Nearly allied to *A. plumosus*.

Asparagus comorensis. (*W. G* 1888, 158; *N. G. M.* 1894, 249, f.)

per. of vigorous climbing habit, with slender emerald-green foliage, somewhat like that of *A. plumosus*. Perhaps the same as *A. decumbens*.

Asparagus plumosus. (*G. C.* 1878, ix. 527.) S. shrubby climber, very elegant, with slender green stems and tufted cladodes (false leaves) each about $\frac{1}{8}$–$\frac{1}{4}$ in. long, bristle-shaped and finely pointed. South Africa.

—— Var. **nanus.** (*Veitch Cat.* 1882, 16, ff. 5–6; *Fl. and P.* 1882. 52.) S. A dwarf form of this beautiful plant. South Africa.

Asparagus racemosus. (*Veitch Cat.* 1880, 19.) S. A climbing species. Mauritius.

Asparagus retrofractus arboreus. (*Jard.* 1890, 255, f.) G. An ornamental Asparagus something in the way of *A. plumosus*, but with straighter stems, and with the cladodes (false leaves) $\frac{3}{4}$–1 in. long.

Asparagus Sprengeri. (*Gfl.* 1890, 490, f. 80; *H. G.* 1890. 503.) G. A decorative plant, somewhat in the way of *A. sarmentosus* and *A. falcatus*, but with the flat linear cladodes (false leaves) placed 1–4 together, nearly straight or only slightly falcate. $\frac{1}{2}$–$1\frac{1}{3}$ in. long, pungent-mucronate. Natal.

Asparagus tenuissimus. (*Fl. and P.* 1882, 52; *Veitch Cat.* 1882, 16.) S. A delicate semi-scandent species, with light green foliage of extreme tenuity. South Africa.

Asparagus virgatus. (*Bull Cat.* 1879, 3.) G. per. of shrubby habit, elegant and feathery. Rootstock emitting several stems, the upper part of which branch in a corymbose manner; branches suberect, again twice branched: cladodes in threes, $\frac{1}{2}$ in. long, acicular. South Africa.

Aspasia papilionacea. (*G. C.* 1876, vi. 100.) Orchidaceæ. S. Pseudobulbs and l. like those of *A. lunata*, but nearly twice as large. Sep. and pet. yellowish, mottled with brownish lines on their lower halves. Lip pandurate, front part large, elliptic, apiculate, with an orange area at its base, and with a wide violet disk before and around it. Costa Rica.

Aspasia principissa. (*G. C.* 1888, iii. 424; *H. G.* 1888, 279.) An interesting Orchid, with fl. like those of an *Odontoglossum*, 2 in. or more in expanse; sep. and pet. linear-lanceolate, light green, with brown lines; lips broadly pandurate, with two parallel tubercles at the base, light buff.

Aspasia psittacina. (*G. C.* 1878, x. 684.) S. Something in the way of *A. epidendroides*, but with larger fl. in a one-sided raceme, and having the lip turned towards the axis. Sep. and pet. light green with brown transverse bars. Lip pandurate with two keels and a few purplish dots over its top. Ecuador.

Asphodelus comosus. (*G. C.* 1887. i. 799.) Liliaceæ. H. per., resembling *A. ramosus*, but differing in the long bracts, which protrude beyond the fl., and in the much exserted stamens. L. $1\frac{1}{2}$ ft. long. $1\frac{1}{2}$ in. broad, ensiform, glaucous. Fl.-stem $2\frac{1}{2}$ ft. high, paniculately branched; fl. white with green keels to the segments. Northwest Himalaya.

Asphodelus Villarsi. (*W. G.* 1888, 272.) H. per., resembling *A. ramosus* but with rather larger more showy fl Europe.

Aspidistra typica. (*W. G.* 1894, 266; *B. M.* t. 7484.) Liliaceæ. S. A species, supposed to have been introduced from Tonkin, with general habit and aspect of *A. elatior* but differing from that in its trimerous symmetry.

Aspidium cristatum clintonianum. (*G. and F.* 1888, 342.) Filices. H. A strong-growing variety.

Aspidium cristatum × marginale. (*G. and F.* 1896. 444, f. 58.) H. A supposed natural hybrid between the two species indicated in the name. Massachusetts.

Aspidium obliquatum Germinyi. (*Ill. H.* 1880, t. 402; *Lind. Cat.* 1881, 2.) S. A handsome fern, with gracefully arching bipinnate fronds crested at their apices and at the tips of the pinnules: stipes black. New Caledonia.

Aspidium simulatum. (*G. and F.* 1896, 484, f. 69.) H. Allied to *A. Thelypteris*, which it resembles in general characters differing chiefly in its longer stipe, introrse lower pinnæ, larger sori and less convolute margins. Missouri.

Asplenium amboinense. (*Williams' Cat.* 1887, 20.) Filices. S. Fern with creeping stem clothed with black subulate scales and numerous evergreen lanceolate fronds, 1 ft. or more long, 1–1½ in. broad, narrowing below into a stipes of about 1 in. long, and with the apex truncate, having a scaly bud at the end of the midrib and a small forked or multifid continuation of the frond. South Sea Islands.

Asplenium apicidens. (*Williams' Cat.* 1881, 31; *G. C.* 1881, xv. 267.) S. evergreen fern in the way of *A. Vieillardii*, with oblong pinnate fronds. Pinnæ few, stalked, oblong, slightly marginate; base bluntly auricled on the front side and cut away on the posterior side: the apex abrupt: the margin serrate; the teeth near the apex elongated and acute. Sori in a crowded series on each side of the midrib. Polynesia.

Asplenium Baptistii. (*Williams' Cat.* 1881, 31; *G. C.* 1881, xv. 235.) S. evergreen fern, with broadly ovate coriaceous smooth bipinnate fronds about 1½ ft. long. Pinnæ stipitate, about 5 in. long, with about four narrow stipitate linear-toothed pinnules. Sori linear-oblong, straight, parallel with and close to the midrib. Polynesia.

Asplenium Campbellii. (*G. C.* 1885, xxiv. 7.) S. Stipes 4–6 in. long, dark, with minute pale brown scales at the base; fronds erect, with 1–2 pairs of contiguous spreading lateral pinnæ and one terminal one, 3–5 in. long, lanceolate, acuminate, bluntly serrate, pale yellowish-green, copiously pellucid-dotted. British and Dutch Guiana.

Asplenium contiguum fissum. (*G. C.* 1881, xv, 267: *Williams' Cat.* 1881, 31.) S. A var. in which the pinnæ have a few of the basal lobes separated quite down to the rhachis, so as to form a bipinnate frond. Polynesia.

Asplenium Drueryi. (*Gard.* 1894, xlv. 472.) H. A var. of *A. Baptistii* with broader pinnæ, which are conspicuously crested.

Asplenium duale. (*G. C.* 1893, xiii. 10.) S. Resembling *A. falcatum* with woody rootstock; pinnate fronds 15 in. high; pinnæ 1 in. broad, serrated, with linear sori in two rows. [Inadvertently described as *Adiantum*. See *G. C.* ibid., p. 40.] Jamaica.

Asplenium Herbstii. (*G. C.* 1896, xx, 470.) G. Fronds very foliaceous and of a bright olive-green colour Origin not stated.

Asplenium heterochroum. (*Bull Cat.* 1878, 155.) S. In the way of *A. monanthemum*, but dwarf, forming dense tufts with erect fronds 4–10 in. high. Stipes slender, narrowly winged, dark brown. Fronds linear, tapering to the base and apex, pinnate; pinnæ trapezoid, margin and apex crenate. Bermuda.

Asplenium horridum. (*Williams' Cat.* 1884, 11, f. 6.) S. An evergreen fern, with leathery pinnate fronds, 3 ft. or more long and 1 ft. broad. Pinnæ close set, linear-lanceolate, pinnatifid. Stipes and rhachides bristly with dark brown fibrillose scales. Sandwich Islands.

Asplenium laffanianum. (*G. C.* 1882, xvii, 673.) S. This has a short erect caudex crowned with 8–10 deltoid bipinnate bright green glabrous fronds. Pinnæ nearly sessile, lanceolate, imbricate. Pinnules oblong, oblique, obtuse, serrate; the upper ones broadly adnate to the rhachis; the lowest free, slightly pinnatifid. Bermuda.

Asplenium marginatum. (*G. C.* 1893, xiii. 641.) S. A large pinnate-leaved species, the fronds ultimately becoming 8 ft. long by 3 ft. in width; the pinnæ strap-shaped and of a rich emerald-green colour.

Asplenium Novæ-caledoniæ. (*Williams' Cat.* 1880, 12.) S. An evergreen fern, remarkable for the coriaceous character of the long narrow divisions of the somewhat triangular tripinnate fronds. Lower pinnæ and pinnules deltoid, the latter distant from the main rhachis, leaving the centre of the frond open. New Caledonia

Asplenium paleaceum. (*Ill. H.* 1878, t. 315.) G. fern of tufted habit, with pinnate spreading fronds 6–10 in. long and 1½–2 in. broad; rhachis densely pilose, with 12–20 pinnules on each side: pinnules elliptic-cuneate or deltoid-ovate, dentate, sub-coriaceous, with sulcate veins; sori linear, almost marginal. Australia.

Asplenium Sandersoni. (*Williams' Cat.* 1880, 13.) S. A dwarf, tufted, evergreen fern, with narrow pinnate fronds

8–10 in. long, proliferous at the tips, and with a solitary proliferous bud near the apex of each pinna. Pinnæ ½ in. long, oblique, the upper margin with a few rounded teeth. Natal.

Asplenium scandens. (*G. C.* 1887, i. 639.) S. A climbing fern, with sessile lanceolate decompound fronds, 1 ft. long, narrowed gradually from the middle to base and apex. Sumatra.

Asplenium Vieillardii facile. (*G. C.* 1881, xv, 235; *Williams' Cat.* 1881, 32.) S. evergreen fern. The deep green feathery fronds are 9–10 in. long, and about as broad, broadly ovate, pinnate, with about five pairs of rather crowded parallel-sided or apically-dilated pinnæ, not auriculate at the base as in the type, narrower, longer, and more numerous. [*A. Vieillardii* is the name to be applied to the form named *A. Schizodon*, which was introduced in 1871, but is an unsatisfactory grower, whereas this variety grows more freely.] Polynesia.

Aster alpinus speciosus. (*Fl.* 1888, 355, t. 1276, f. 1; *H. G.* 1888, 401.) Compositæ. H. A robust var., about 1½ ft. high, with very showy fl. 3 in. in diam.; rays purple; disk yellow.

Aster angustus. (*G. C.* 1886, xxvi. 659.) H. per. of little beauty, 1–2 ft. high, branching, with numerous spicately panicled heads, having the ray-florets rudimentary. North America and North Asia.

Aster diplostephioides. (*B. M.* t. 6718; *R. H.* 1884, 288; *Fl. and P.* 1883, 169.) H. A handsome species, everywhere clothed with glandular hairs. Stem 6–18 in. high, with rather distant lanceolate or oblanceolate acute l., the radical ones shortly petioled, those on the stem sessile. Fl.-heads solitary, very showy, 2–3 in. in diam., with light purple ray-florets and yellow disk-florets, which are of a purple-brown before they open. Himalaya

Aster gymnocephalus. (*B. M.* t. 6549.) H. H. biennial or annual, remarkable for its bristle-toothed l.: the radical ones somewhat lanceolate spathulate, those on the stem sessile or sub-amplexicaul, lanceolate: the margins of all are dentate, the teeth being bristle-tipped. The heads are solitary, 1 in. in diameter; involucre with reflexed phyllaries; rays bright rose-purple; disk yellow. Mexico.

Aster Herveyi. (*G. and F.* 1889, 472, f. 131.) H. per. A slender plant 1–2 ft. high: slightly scabrous: l. obscurely serrate, ovate, on naked petioles, upper ones lanceolate; fl. in loose corymbose heads, bright lilac or violet; rays narrow, ½ in. long. North America.

Aster lindleyanus. (*G. and F.* 1889, 448, f. 127.) H. A showy species, stems 1–2 ft. high: lower l. ovate, obscurely cordate: petioles winged: upper l. sessile, acuminate at both ends, serrate; fl. in loose panicles, pale violet; rays ½ in. long. North America.

Aster Novæ-Angliæ pulchellus. (*Fl. and P.* 1882, 26.) H. A handsome form with pale magenta fl.

Aster Pseud-amellus. (*G. C.* 1886, xxvi. 659.) H. per. 6–18 in. high, allied to *A. Amellus*, but with larger involucral bracts and toothed l.: stems rough, bearing a few corymbose heads 1–1¾ in. in diam., with bluish-purple rays. L. 1–2 in. long, oblong, acute or obtuse, entire or toothed, obscurely nerved. Involucre bracts with broad reflexed leafy tips. Western Himalaya.

Aster Stracheyi. (*B. M.* t. 6912; *G. C.* 1886, xxvi. 659; *R. H.* 1887, 167.) H. per. Very dwarf and stoloniferous, 1–4 in. high, pubescent or villous. Radical l. obovate-spathulate, toothed; stem-l. 1–2 in. long, sharply serrate. Stem, with 1 to few fl.-heads, 1 in. in diam. Involucre of a few narrow scales, scarcely imbricating. Rays bluish-purple. Western Himalaya.

Aster Townshendii. (*B.M.* t. 6430.) H. per. A handsome large-flowered species, with stout branching shortly hairy stem. Radical l. 8–12 in. long, elongate-spathulate, very obtuse: stem l. oblong-ovate, acute, sessile, semi-amplexicaul, margin with a few teeth. Heads 2½ in. across; involucre squarrose; rays purple; disk yellow. Colorado.

Aster tricephalus. (*G. C.* 1886, xxvi. 686.) H. per. 1–2½ ft. high, with leafy puberulous stems, bearing 1-3 large showy heads with purple rays. Radical l. obovate-spathulate, on long winged petioles, entire, glabrous or hairy: stem-leaves oblong, half amplexicaul. Sikkim.

Aster Vilmorini. (*J. H. F.* 1896, 1188.) H. A species remarkable for its large flower-heads with ray-florets of a bluish-purple colour, either solitary or in pairs at the top of a long naked stalk. Western China.

Astilbe chinensis. (*Gard.* 1892, xlii. 221.) Saxifragaceæ. H. A fine hardy plant resembling *A. japonica*, but with more loosely branched infl. and rose-coloured fl. China.

Astilbe Lemoinei. (*R. H.* 1895, 567, f. 185.) H. A garden hybrid between *A. Thunbergii* and *A. astilboides floribunda*.

Astragalus gilgianus. (*N. B.* 1896, 185.) Leguminosæ. H. A per. with silvery l. and deep ray-violet fl. Nearly related to *A. cretaceus*, *A. oxytropifolius* and *A. eriophyllus*. Asia Minor.

Astrocaryum decorum. (*Bull Cat.* 1879, 3.) Palmæ. S. Elegant dwarf palm. L. pinnate, with lanceolate leaflets, criniferous on the ribs above. Colombia.

Astrocaryum granatense. (*Bull Cat.* 1876, 4.) S. palm. Petiole brownish, both it and the rhachis armed with needle-shaped, dark-coloured spines. Leaflets oblong-acuminate. Colombia.

Asystasia varia. (*G. C.* 1892, xii. 760.) Acanthaceæ. S. A small shrub less than 1 ft. in height, with 4-angled stems, ovate or lanceolate l., and short axillary racemes of tubular 2-lipped mauve and brown fl. Zululand.

Athyrium Filix-fœmina acrocladon Wilsoni. (*G. C.* 1887, i. 185–6.) Filices. H. A var. which is stated to be intermediate between the vars. *rhæticum* and *crispum*, but no description is given. Scotland.

—— Var. **laciniato-acrocladon.** (*Fl. and P.* 1882, 105.) Crested form of var. *acrocladon*.

—— Var. **magnicapitatum.** (*Fl. and P.* 1882, 105.) Crested form of var. *acrocladon*.

—— Var. **ramosissimum fimbriatum.** (*Fl. and P.* 1882, 105.) Crested form of the var. *acrocladon*.

—— Var. **unco-glomeratum.** (*Fl. and P.* 1882, 36.) H. A dwarf var. of the Lady-fern, with the fronds branching and crested like those of the var. *acrocladon*, but the ultimate divisions are cut into minute segments.

Athyrium Filix-fœmina velutinum. (*G. C.* 1882, xviii, 307; *Fl. and P.* 1882, 26.) A dwarf dense finely divided variety.

Athyrium setigerum. (*G. C.* 1892, xii, 249.) Name only.

Atraphaxis Muschketowi. (*B. M.* t. 7435.) Polygonaceæ. H. A dwarf spreading shrub with brown branches and shortly-stalked pale green l. Fl. about ⅓ in. broad, white, with red anthers and ovary. Central Asia.

Atriplex halimoides monumentalis. (*B. T. O.* 1890, 42. f. 3; *Gfl.* 1890, 105, f 24.) Chenopodiaceæ. H. A seedling form of tall habit, growing to 9 or 10 ft. high. [Syn. *A. nummularia*, Lindl. var. *monumentalis*. *Damm. Cat.* 1890–91, 87, f. 58.]

Atriplex nummularia. (*Damm. Cat.* 1890–91, 87.) H. H. A much branched shrubby plant growing to 9 or 10 ft. in height with silvery-white l. and fl. Australia.

Aubrietia Leichtlini. (*W. G.* 1888, 325; *Gfl.* 1886, 349.) Cruciferæ. H. per. A form with deep red fl.

Aulacophyllum Wallisi. (*G. C.* 1882, xvi, 685.) Cycadaceæ. S. This is the plant known as *Zamia amplifolia* and *Z. Wallisi*.

Azalea dianthiflora. (*R. H.* 1889, 391; *W. G.* 1889, 442.) Ericaceæ. G. A vigorous free-flowering shr. with rather large elliptic-oblong softly hairy l. Calyx-lobes long, pubescent. Corolla 3 in. in diam., rose or violet, dotted with dark brown. Pedicels tomentose. Japan.

Azalea hybrida Daviesii. (*Gfl.* 1893, 65. t. 1387.) H. A garden hybrid with white fls., supposed to have been produced by crossing *A. sinensis* with *A. viscosa*.

Azalea mollis×. (*G. C.* 1893, xiii, 665.) H. Hybrids of *A. mollis* (*Rhododendron sinensis*) with the evergreen hybrid *Rhododendron* "*John Waterer*" have been named *Azaleodendron*.

Azalea obtusa alba. (*Veitch Cat.* 1887, 9.) G. shr. A var. with white fl. Japan.

Azalea rosæflora. (*F. M.* t. 418.) H. A form with deep rosy-red double fl. [*Rhododendron indicum*, Sweet, var. *balsaminæflorum*.] Japan.

Azalea rubiflora, flore pleno. (*Fl. and P.* 1882, 89.) H. deciduous shr. with soft pilose oblong l., and double lilac-pink fl. spotted with carmine-purple. Japan.

Azalea rustica, flore pleno. (*R. H.* 1893, 195.) H. A garden race said to be derived from *A. mollis* and *A. occidentalis*.

Azaleastrum albiflorum. (*W. G.* 1888, 435.) H. Ericaceæ. [*Rhodondendron albiflorum*, Hook.]

Babiana socotrana. (*B. M.* t. 6585.) Iridaceæ. S. bulb, 3–4 in. high, with dark green linear-lanceolate acuminate l., and sessile 2-lipped violet-blue fl. Socotra.

Baccharis salicina. (*Späth Cat.* 1894–5.) Compositæ. H. A bush 6 ft. high, with narrow willow-like gray-green l. Western North America.

Baccharis trimera. (*R. H.* 1896, 152, ff., 50–2.) G. A leafless shr. attaining a height of 6 ft. with winged expansions along the stems. Fl.-heads small, inconspicuous. Argentine.

Bæa hygrometrica. (*B. M.* t. 6468.) Gesneraceæ. S. A stemless per., with rosulate broad trapezoid-elliptic crenate-serrate l., and slender few-flowered leafless scapes, with pale blue fl. $\frac{3}{4}$ in. in diam. North China.

Bæckea parvula. (*Gfl.* t. 886, f. 2.) Myrtaceæ. S. shr. with small opposite oblong-lanceolate sub-acute l., and small axillary or terminal 3–6-flowered cymes of small white fl. Pet. roundish with a short claw. Stamens 10, short, erect, seated around the top of the subglobose inferior ovary. New Caledonia.

Bæria gracilis. (*Gfl.* 1887, 392, f. 96.) Compositæ. H. annual, 6–10 in. high, branching from the base, with opposite linear l. and solitary radiate heads of bright yellow fl., about $\frac{3}{4}$ in. in diam. California.

Bahia confertiflora. (*Gfl.* 1888, 329, t. 1275, f. 1; *G. C.* 1888, iii. 806.) Compositæ. H. herb. per. 12–18 in. high, more or less woolly. L. small, cuneate, pinnately 5–7-lobed, lobes linear. Stems naked at the summit, terminated by small dense corymbose cymes of yellow radiate flower-heads. [*Eriophyllum confertiflorum*, A. Gray.] California.

Bakeria tillandsioides. (*R. H.* 1889, 84, t.*; *W. G.* 1889, 144.) Bromeliaceæ. S. A Bromeliad similar to *Tillandsia argentea* in appearance, with attenuate silvery l., and a lax panicle 16–20 in. high, of pretty rosy-purple fl. about $\frac{1}{3}$ in. in diam. Brazil.

Bakeria vitiensis. (*Gfl.* 1887, 71.) Araliaceæ. S. A small tree with an unbranched stem. L. digitate, with 5–10 petiolate elliptic obovate leaflets with blunt points. Fl. in large compound umbels, green. [*Plerandra vitiensis*, Baill.] Fiji.

Ballota suaveolens. (*W. G.* 1889, 81; *H. G.* 1889, 187.) Labiatæ. H. H. annual of erect branching habit, with oval serrate l. and pretty blue fl. The whole plant is strongly scented. West Indies.

Baltimora recta. (*R. H.* 1879, 440.) Compositæ. H. H. annual, about 1 ft. high, with a dichotomously branched stem, opposite ovate-lanceolate acute l., and yellow radiate fl.-heads. [Also bears the name of *Fougerouxia recta*.]

Bambusa angustifolia. (*Gard.* 1894, xlvi. 547.) Gramineæ. H. A dwarf hardy bamboo, with slender stems 1 ft. high, much branched, purplish when young: leaves $4\frac{1}{2}$ in. by $\frac{1}{2}$ in., serrated, green with silver stripes. [Syn. *B. Vilmorini*, Hort.] Japan.

Bambusa Castilloni. (*R. H.* 1886, 513, f. 122.) H. Bamboo with square stems, curiously variegated, one side of each internode being dark green and the other side yellow, these colours alternating in the next internode. L. also variegated. [*Phyllostachys Castillonis*, Mitford.] Japan.

Bambusa chrysantha. (*G. C.* 1894, xv. 368.) H. A species, with slender stems 3 ft. or more high; l. 7 in. by $1\frac{1}{4}$ in., green, striped with yellow, slightly glaucous beneath. [*Arundinaria chrysantha*, Mitford.] Japan.

Bambusa disticha. (*Gard.* 1894, xlvi. 547.) H. Stems 2 ft. high, thin, with distichously arranged branches and l.; the latter 2 in. by ½ in. rigid, evergreen. [This name has been given to a dwarf bamboo long cultivated under the name of *B. nana*, Hort. not of Roxburgh.] Japan?

Bambusa Henonis. (*G. C.* 1894, xv. 368.) H. [*Phyllostachys Henonis*, Mitford.] Japan.

Bambusa heterocycla. (*R. H.* 1878, 354, f. 80.) H. A much branched bamboo, with oblique annulations, variously placed; foliage resembling that of *B. aurea*. [*Phyllostachys heterocycla*, Mitford.] Japan.

Bambusa Laydekeri. (*G. C.* 1894, xv. 368.) H. Stems 3 ft. or more high, round, much branched; l. 6 in. long, narrow, green mottled with dull yellow. [*Arundinaria Laydekeri*, Hook. f.] Japan.

Bambusa marmorea. (*Gard.* 1894, xlvi. 547.) H. Stems 3 ft. or more high, slender, purplish, freely branched; l. 4½ in. by ½ in. bright green, serrated, with a constriction on one side near the apex. The sheaths which enclose the young stems are purple, marbled with silver grey. [*Arundinaria Kokan-tsik*, Kurz.] Japan.

Bambusa Maximowiczii vittata. (*Williams' Cat.* 1880, 13.) H. A var. in which the l. are striped with white and light green. [*Arundinaria Simoni*, A. & C. Rivière, var. *variegata*, Hook. f., *B. M.* t. 7146.]

Bambusa Nagashima. (*Gard.* 1894, xlvi. 547.) H. A dwarf bamboo: stem about 2 ft. high, round, purplish; l. 6 in. by ¾ in., serrated; leaf-sheaths hairy. Japan.

Bambusa nana. (*Bull Cat.* 1879, 3.) H. bamboo of dwarf habit, with slender twice-branched stems, having small tufts of short leafy twigs. L. distichous, ovate-lanceolate, 1 in. long, bright green above, glaucous below. [*B. disticha*, Mitford.] Japan.

Bambusa pumila. (*G. C.* 1894, xv. 368.) H. A bamboo with thin stems less than 3 ft. high, unbranched; leaves 4½ in. by ¾ in. covered with short hairs. Japan.

Bambusa pygmæa. (*G. C.* 1894, xv. 368.) H. The dwarfest bamboo in cultivation; stems less than 1 ft. high, creeping and branching freely; l. 4 in. by ½ in., green. [*Arundinaria pygmæa*, Kurz.] Japan.

Bambusa Ragamoskii. (*R. H.* 1880, 80.) H. Bamboo, something in the way of *Arundinaria japonica*, but with much larger l. [*B. tessellata*, Munro.] Japan.

Bambusa senanensis. (*G.* 1894, xlvi. 546.) H. Apparently identical with *Arundinaria Veitchii*. Japan.

Bambusa sterilis. (*G. C.* 1894, xv. 368.) H. This appears to be *Phyllostachys aurea*, A. & C. Rivière. Japan.

Bambusa Veitchii. (*R. H.* 1888, 90; *G. C.* 1888, iii. 332.) H. A dwarf bamboo, with terete stems, and oblong acuminate l., 4–8 in. long, 1¼–2¼ in. broad, bright green above, bluish-green beneath, changing in autumn to yellow, or with a broad yellow border. Japan. [*Arundinaria Veitchii*, N. E. Br.]

Bambusa violascens. (*R. H.* 1878, 420.) S. per. ornamental grass, of vigorous growth and robust habit, with blackish-violet buds and abundant bright green l. [*Phyllostachys violascens*, A. & C. Rivière.]

Bambusa Weiseneri. (*R. H.* 1887, 83.) H. Garden variety, of Japanese origin.

Barbacenia squamata. (*G. C.* 1890, viii. 408, f. 81; *H. G.* 1890, 554.) Amaryllidaceæ. S. plant with slender stems, narrow grassy l., and star-shaped fl., coloured bright red. Introduced by Veitch from Brazil in 1841 but soon afterwards lost. It was re-introduced through Kew in 1890.

Barkeria cyclotella. (*G. C.* 1880, xiii. 72, f. 15.) Orchidaceæ. S. epiphyte, with fl. very near those of *B. lindleyana*. Mexico.

Barkeria elegans nobilior. (*G. C.* 1886, xxv. 234.) S. A large-flowered var. with a black-purple spot on the lip.

Barkeria vanneriana. (*G. C.* 1885, xxiv. 678.) S. Fl. equal to that of *B. lindleyana*, of a fine rosy-purple colour, with a small whitish disk on the rounded acute lip.

Barleria involucrata elata. (*G. C.* 1890, vii. 448; *Gfl.* 1890, 448.) Acanthaceæ. S. A compact shrub 6 ft. high, and of showy appearance. Fl. 2½ in. across, dark blue. Singapore.

Barleria repens. (*B. M.* t. 6954; *G. C.* 1887, ii. 341.) S. A dwarf prostrate much-branched shrub, with elliptic or obovate obtuse l., 1 2½ in. long, narrowed into a petiole, and solitary axillary deep rose-coloured fl., 1–1½ in. in diam., funnel-shaped, with 5 oblong spreading lobes. East Tropical Africa.

Batemannia lepida. (*G. C.* 1878, ix. 588.) Orchidaceæ. S. epiphyte, allied to *B. Colleyi*, but with an erect infl. Fl. twice as large, and of more vivid colours. Lip ligulate, trifid before the middle; side lobes narrowly triangular, with teeth; its middle lobe cuneate, obcordate. Brazil.

Batemannia peruviana. (*K. B.* 1895, 193; *G. C.* 1895, xvii. 551, f.) S. Pseudobulbs four-angled, 2 in. long; leaves lanceolate, 8 in. long; raceme few-flowered; fl. 2 in. across, brown tipped with green, the lip white with purple dots. Peru.

Batemannia Wallisii. (*Bull Cat.* 1876.) S. Spikes a foot long; fl. very large, reddish-brown, the centre veined with bright crimson, and surrounded with chocolate-brown blotches; lip veined with crimson. Colombia.

Bauhinia corymbosa. (*B. M.* t. 6621.) Leguminosæ. S. A woody climber, with bilobed l., and large corymbs of bright rosy fl. 1 in. in diam. terminating almost every shoot. China.

Bauhinia Galpini. (*G. C.* 1891, ix. 728; *Icones Plantarum*, t. 1994; *B. M.* t. 7496.) S. It is a dwarf shrub with two-lobed l. and racemes of large handsome crimson fl. Transvaal.

Bauhinia petiolata. (*B. M.* t. 6277.) S. The correct name for *Casparia speciosa* of gardens.

Bauhinia variegata. (*B. M.* t. 6818.) S. A small tree with large broad 2-lobed l., 3–4 in. long and broad, on slender petioles, and racemes of large handsome purple fl. about 3 in. diam. Petals elliptic-obtuse, clawed, the lower one broadest and streaked with crimson. India.

Bauhinia variegata candida. (*B. M.* t. 7312; *J. of H.* 1893, xxvi. 277, f. 54.) S. A handsome shrub 5 ft. high with bright green l. and large pure white fragrant fl. [The type is figured in *B. M.* t. 6818.] Tropical Asia.

Beaufortia sparsa. (*B. M.* t. 7231.) Myrtaceæ. G. This is the correct name for the plant cultivated in England under the name of *B. splendens*. Paxt.

Begonia acerifolia. (*Veitch Cat.* 1896, 51.) Begoniaceæ. S. A garden hybrid between *B. Burkei* and *B. decora*. [There is a species called *B. acerifolia*, H. B. K., native of Ecuador.]

Begonia albo-picta. (*Bull Cat.* 1885, 13, 4, f.) S. A distinct species of compact shrubby habit, with obliquely-lanceolate shortly-stalked l. of a glossy green spotted with white. Brazil.

Begonia amabilis. (*Lind. Cat.* 1883, 1.) S. A species with bronzy-green l., spotted with white, the under side wine-red. Sumatra.

Begonia Ameliæ. (*R. H.* 1885, 512, ff. 89–90.) G. A garden hybrid between *B. Bruanti* and *B. Rœzli*.

Begonia Baumanni. (*Jard.* 1890, 273; *G. C.* 1890, viii. 466; *B. M.* t. 7540.) G. A species with the habit of *B. socotrana*, having a tuberous rootstock which produces short fleshy stems. L., few, reniform, dark green, bronzy or purplish beneath. Peduncles erect, leafless, purplish, 12–18 in. high, bearing about five large carmine-rose fl. 3–4 in. in diameter, and agreeably scented.

Begonia Beddomei. (*B. M.* t. 6767; *Fl. and P.* 1884, 123.) S. A species of dwarf habit and with ornamental foliage. Petioles erect, hairy; leaf-blade very obliquely cordate-ovate, lobed and toothed on the margin, green, with white spots and pale margin above, purplish beneath. Peduncles about as long as the petioles bearing a few-flowered cyme of light pink fl., 1–1¼ in. in diam. [As *B. assamica* in *Bull Cat.* 1884, 11.] Assam.

Begonia bicolor. (*W. G.* 1891, 137, t. l.; *B. T. O.* 1891, 189.) G. A tall erect-growing species, with broad obliquely-reniform l., green spotted with white, the upper ones with bulbils in their axils. The fl. are bright rose, disposed in a terminal raceme, the peduncles being 1-3-flowered. [*B. gracilis*, H. B. K.] Mexico.

Begonia Bismarcki. (*Veitch Cat.* 1888, 10.) S. Garden hybrid.

Begonia Bruanti. (*Fl. and P.* 1883, 41; *R. H.* 1882, 377.) S. A garden hybrid between *B. Schmidtii* and *B. semperflorens*.

Begonia carminata. (*Veitch Cat.* 1896, 2.) G. A garden hybrid between *B. coccinea* and *B. Dregei*.

Begonia Carrieri. (*Fl. and P.* 1884, 58.) G. A garden hybrid between *B. semperflorens* and *B. Schmidtii*.

Begonia castanæfolia alba. (*R. H.* 1885, 395.) S. A large and robust var. with white fl.

Begonia cinnabarina albovittata. (*Ill. H.* 1892, t. 165.) G. A garden var. having the pet. striped with white.

Begonia Clementinæ. (*Ill. H.* 1888, 11, t. 39.) S. Garden hybrid.

Begonia coccinea. (*R. H.* 1889, 131.) G. Garden hybrid.

Begonia compta. (*Bull Cat.* 1886, 7.) S L. obliquely ovate, angular, of a satiny green. with a silvery tinge along the course of the midrib. Brazil.

Begonia coronata, (*Lemoine Cat.* 1893.) S. A garden hybrid between *B. caroliniæfolia* and *B. polyantha*.

Begonia Credneri. (*Gfl.* 1890, 562, f. 99; *H. G.* 1890, 482.) S. A garden hybrid between *B. scharffiana* and *B. metallica*.

Begonia cyclophylla. (*B. M.* t. 6926.) S. A tuberous species, with a solitary orbicular-cordate sparsely hairy deep green l., having overlapping basal lobes, and pedunculate cymes of bright rose-pink fl. 1 in. in diam. South China.

Begonia daveauana. (*R. H.* 1880, 290.) S. [Not a *Begonia* but *Pellionia daveauana*, N. E. Br.]

Begonia Davisii. (*B. M.* t. 6252.) G. Herbaceous per. of dwarf compact habit and with brilliant fl. L. radical, obliquely roundish-cordate, subacute, shining green above, with some scattered erect stiff hairs, more glabrous and red beneath: margins shallowly lobulate and crenate. Scapes longer than the l., red, glabrous, bearing a few (3–4) bright crimson-scarlet fl.; pet. 4, nearly equal. Peru.

Begonia Davisii, flore pleno. (*F. M.* t. 477.) G. Fl. large, double, crimson-scarlet.

Begonia decora. (*G. C.* 1892, xii. 621; *G. and F.* v. 561: *Veitch Cat.* 1893, 9, f.) S. Short fleshy stem, crowded with ovate l. 5 in. long, 3 in. wide, coloured coppery-red with yellowish veins. Fl. pink. Perak.

Begonia decora. (*Bull Cat.* 1886, 7.) A shr. with dark green obliquely lanceolate l. profusely dotted with silvery grey, something like those of *B. argyrostigma*, but the spots more minute. [This is probably *B. albopicta*.] Brazil.

Begonia Diadema. (*Ill. H.* 1882, t. 446; *Lind. Cat.* 1882, 3.) S. L. palmatifid, dark green. handsomely spotted with white. The stem is erect with elongated internodes, green. Borneo.

Begonia Duchartrei. (*R. H.* 1892, 29, f. 7.; *Gard.* 1892. vi., 115.) S. A garden hybrid between *B. echinosepala* and *B. scharffiana*.

Begonia egregia. (*G. C.* 1887. i. 346; *Bull Cat.* 9.) S. An evergreen species with a tall-growing thick stem, peltate obliquely-oblong acuminate bright green thin l., which are rough from hair-bearing papillæ, and terminal drooping corymbose cymes of numerous white fl. ½ in. in diam. Brazil.

Begonia excelsior. (*Lemoine Cat.* 1893, No. 123.) G. A garden hybrid between *B. Baumanni* and *B. Veitchii*.

Begonia faureana metallica. (*Ill. H.* 1895, 298, t. 43.) S. A var. with more deeply-coloured l. than the type.

Begonia Frœbeli vernalis. (*B. H.* 1880, 215.) G. tuberous per. Flowering from December to March. Otherwise like the type.

Begonia fulgens. (*Lemoine Cat.* 1893, No. 123.) G. Rootstock tuberous; l. roundish-oblique, green; racemes numerous; fl. rich red, fragrant. It is closely related to *B. Davisii*. Bolivia.

Begonia glaucophylla. (*B. M.* t. 7219.) S. A well-known garden plant, the history and description of which were here first published along with a figure. Brazil.

Begonia globosa. (*Gfl.* 1888, 645, f. 143.) G. Garden hybrid,

Begonia goegoensis. (*G. C.* 1882, xviii. 71 : *Fl. and P.* 1882, 121.) S. A dwarf evergreen species, with large peltate orbicular-ovate bullate l. of a rich dark green with beautiful bronzy reflections, and the course of the nerves crystalline pale green, the under side and margins purple-red. Petioles 4-angled. Fl. ½ in. in diam., in pedunculate cymes. Sep. pink. Pet. smaller, white. Sumatra.

Begonia haageana. (*G. C.* 1888, iv. 49.) S. Figured in *B. M.* t. 7028, as *B. Scharffii*.

Begonia Heracleicotyle. (*Veitch Cat.* 1895, 48.) S. A garden hybrid between *B. heracleifolia* and *B. hydrocotylifolia*.

Begonia hoegeana. (*Gfl.* 1886, 398.) S. Somewhat in the way of *B. nitida* ; very glabrous, with a climbing stem, and broadly ovate l. rounded at the base, and scarcely oblique. The white fl. are in axillary lax cymes, and only half as large as those of *B. nitida*. Mexico.

Begonia Jaurezi. (*H. G.* 1890, 364.) G. A garden variety with semi-double fl.

Begonia Johnstoni. (*B. M.* t. 6899 ; *B. H.* 1887, 45.) S. per., 1–1½ ft. high, glabrous : stems succulent, pale green spotted with red. L. on long petioles, obliquely cordate-ovate, acute, crenate, the basal lobes overlapping, dark green above, paler beneath. Cymes few-flowered, on long peduncles, fl. pale rose, the males about 1 in., the females about ½ in. in diam. East Tropical Africa.

Begonia Lansbergeæ. (*Ill. H.* 1893, 41, t. 174.) S. A species with large hairy emerald-green leaves. Brazil.

Begonia Lemahoutii. (*Jard.* 1889, 258.) G. per. of compact habit, with oblique acuminate dark green l., washed with purple beneath, wavy, toothed, and ciliate on the margin. Peduncles rising above the l., bearing cymes of white fl., tinted with rose outside.

Begonia Lesoudsii. (*R. H.* 1888, 20, f. 5.) G. Garden hybrid.

Begonia lineata. (*G. C.* 1882, xviii. 199.) S. A tuberous species, dying down annually. L. obliquely cordate, ovate, acute, sinuate or lobed, blackish green, more or less densely covered with silvery-grey spots. Cymes terminal. Fl. 1 in. in diam., pale pink, with the base of the segments and the veins deep rose. Java.

Begonia Lubbersii. (*R. H.* 1884, 171, 1888, 225, f. : *Fl. and P.* 1884, 58 : *G. C.* 1888, iii. 301, f. 48.) S. Ornamental foliage plant with peltate narrow elongate obliquely-oblong l., 6 in. long by 2½ in. broad, of very dark shining green above, with a pearly lustre, spotted with silvery markings : under surface purple. Fl. large, whitish, in axilliary dichotomous cymes. Brazil.

Begonia lyncheana. (*B. M.* t. 6758 : *Fl. and P.* 1884, 124.) S. A free-flowering species, with tall stout stems, large obliquely roundish-reniform glabrous green l., and large corymbose cymes of bright carmine fl., 1–1½ in. in diam. Colombia.

Begonia margaritacea. (*Veitch Cat.* 1895, 3 : *N. G. M.* 1895, 321, f.) G. A garden hybrid : parentage not stated. Apparently related to *B. incarnata*.

Begonia Margaritæ. (*R. H.* 1884, 200, f. 48.) S. foliage plant. A garden hybrid between *B. metallica* and *B. echinosepala*.

Begonia martiana pulcherrima. (*Lemoine Cat.* 1893, No. 123.) G. A var. with small purple tinged l. and large carmine-red fl.

—— Var. **racemiflora.** (*R. H.* 1886, 202.) G. A decorative var. of bushy habit, with red stems, and darker fl. than in the type.

Begonia metallica. (*F. M.*, t. 197.) G. Per. of shrubby habit, and a profuse flowerer. L. obliquely cordate-ovate, sub-bilobate, margin sinuate-lobed and toothed, deep bronze-green with a metallic lustre. Fl. umbellate : female with five equal pet., male with two large and two small pet., white with a large central rose-coloured spot, darker at the back and hairy.

Begonia meysseliana. (*Lind. Cat.* 1883, 1.) S. A dwarf species with bright green l. spotted with silvery markings. Sumatra.

Begonia octopetala Lemoinei. (*R. H.* 1889, 32, f. 7.) G. Garden hybrid between *B. octopetala* and a tuberous Begonia.

Begonia odoratissima. (*Lemoine Cat.* 1896, 49.) G. A race of tuberous rooted Begonias with fragrant fl.

Begonia Olbia. (G. C. 1884, xx. 720, f. 128; *R. H.* 1884, 40, f. 11; *Fl. and P.* 1884, 17, t. 603.) S. Ornamental foliage plant, with short fleshy stem, large obliquely cordate-ovate lobed and toothed l., dark bronzy-green, spotted with white above, dark purplish beneath; the upper surface covered with reddish hairs, and with short-peduncled few-flowered cymes of white fl. Brazil.

Begonia patula. (*Rejel Descr.* 13.) S. per. A suffruticose species, growing to 3 ft. in height, with obliquely cordate l. angulate or doubly toothed on the margin, dark green and sparsely hairy above, reddish beneath; cymes many-flowered; fl. pink. Brazil.

Begonia pictaviense. (*W. G.* 1891, 155.) S. A garden hybrid between *B. scharffiana* and *B. metallica*.

Begonia platanifolia decora. (*G. C.* 1894, xv. 663.) Begoniaceæ. S. A distinct variety.

—— Var. **illustris.** (*G. C.* 1894, xv. 663.) S. A distinct variety.

—— Var. **ohlendorffiana.** (*G. C.* 1878, x. 780.) S. A handsome plant, with short woody stems and ornamental foliage; the l. are very unequal-sided, with sinuses and angles on one side, dark purplish or green according to the temperature, becoming green as the temperature is raised, prettily blotched with white. Cymes few-flowered; sep. broad, serrate. Brazil.

—— Var. **pulvinata.** (*G. C.* 1894, xv. 663.) A distinct variety.

Begonia Rajah. (*G. C.* 1894, xvi. 213, f. 31.) S. A dwarf species, closely allied to *B. gorgonensis*, but differs in having terete hairy petioles, unequally cordate blades coloured rich metallic green and coppery red. The fl., which are inconspicuous, are pale pink, and borne in loose erect racemes. Malaya.

Begonia Rex × decora. (*Jard.* 1886, 267, f. 123.) S. A series of hybrids raised from the two parents above-mentioned is described.

Begonia Rex × socotrana. (*G. C.* 1894, xvi. 669.) S. A garden hybrid between the two species indicated by the name.

Begonia Roezli. (*Gfl.* t. 871.) S. [*B. lynchiana*, Hook. f.]

Begonia roseo-multiflora. (*G. C.* 1892, xii. 249.) G. A var. of *B. semperflorens*.

Begonia rubella. (*Bull Cat.* 1883, 12.) G. An ornamental species with stout decumbent stems, and numerous obliquely ovate lobed toothed and ciliate l. of a bronzy green, with the veins marked out with pale green, and spotted all over with purplish-brown; under surface red. India.

Begonia Sceptrum. (*Bull Cat.* 1884, 5, 11.) S. L. oblique, deeply palmately lobed, handsomely blotched with silver-grey. Lobes of the l. oblong, obtuse. Brazil.

Begonia Scharffii. (*B. M.* t. 7028; *G. C.* 1888, iv. 670, 695.) S. A free-flowering species, 1½–2 ft. high, hispid with red hairs. L. 4–10 in. long, 2–5 in. broad, obliquely cordate-ovate acuminate, purplish beneath. Fl. white, in large long-stalked corymbs. Male fl. 2–2½ in. in diam., with two large elliptic sep., echinate with red bristles outside, and two narrow spathulate petals. Female fl. smaller, with equal obovate segments; ovary 3-winged, echinate, with red bristles. [*B. haageana*, W. Wats.]

Begonia schmidtiana. (*Gfl.* t. 990.) G. or S. A free-flowering species, with rather small oblique-cordate ovate l., green above, purple with a green margin beneath. Fl. white, tinted with red on the back. South Brazil.

Begonia semperflorens rosea. (*R. H.* 1881, 330, t.) G. A var. with deep rose-coloured fl.

—— Var. **Sturzii.** (*Gfl.* t. 1220.) G. A floriferous var. with cymose panicles of rose-pink fl. and having the l. spotted with white.

Begonia socotrana. (*G. C.* 1881, xv. 8, f. 1; *B. M.* t. 6555.) S. Rootstock tuberous. The l. are large, orbicular, and peltate, bright green. Fl. 1 in. or more in diam., bright rose-pink, disposed in lax cymes. Socotra.

Begonia Teuscheri. (*Ill. H.* 1879, t. 358.) S. L. deep green, spotted and marbled with whitish-green, and margined with red. Dutch Indies.

Begonia umbraculifera. (*B. M.* t. 7457.) S. A remarkable plant both in habit and in having hermaphrodite fl. A tall species with alternate large reniform or peltate l. and crowded corymbs of white fl. chiefly male with a few female and bisexual ones. Brazil.

Begonia Verschaffelti. (*R. H.* 1881, 380.) S. A free-flowering form, with stout stem, long-petioled palmate l., and numerous axillary compact cymes of rose-coloured fl.

Begonia Williamsii. (*Williams' Cat.* 1882, 24.) G. or S. A form of free-branching habit, with large white fl. 3 in. in diam. It remains a long time in fl.

Bellevallia Aucheri. (*B. T. C.* 1894, 227.) Liliaceæ. H. A species with long fleshy broad l. and dense racemes of small purplish tinted fl. [The correct name is *Hyacinthus Aucheri*, Baker.] Persia.

Bentinckia nicobarica. (*Sand. Cat.* 1895, 46.) Palmæ. S. Trunk attaining a height of 70 ft. and 9 in. diam. L. 8 ft. long; leaflets 2 ft. long, linear, bright green.

Berberis aristata integrifolia. (*W. G.* 1888, 108.) Berberidaceæ. H. shr. A var. with few or no spines on the edge of the l.

Berberis buxifolia. (*B. M.* t. 6505.) H. shr. L. tufted, 1–1½ in. long, cuneate-obovate, coriaceous. Fl. solitary, pendulous, on long pedicels, orange-yellow. Chili.

Berberis congestiflora hakeoides. (*B. M.* t. 6770.) H. shr. L. shortly stalked, roundish or broadly elliptic, with spiny margins. Fl. in dense axillary clusters, crowded towards the ends of the branches; bright yellow. Chili.

Berberis diaphana. (*Späth Cat.* No. 95, 59.) H. An upright strong-growing shr. with light green l. and handsome fruits; spines about 1 in. long. China.

Berberis Fendleri. (*G. and F.* 1888, 460, 462 f. 72.) H. In the way of *B. vulgaris*. Stem and branches purplish, shining. Fl. in racemes 1–2 in. long, yellow, with some red bracts at the base of the calyx. Rocky Mountains.

Berberis Fremonti. (*G. and F.* 1888, 496, f. 77.) H. evergreen shr. One of the *Mahonia*-section. L. pinnate; leaflets in 2–3 pairs, oblong-lanceolate, with 2–3 large spine-tipped teeth on each side. Racemes ascending, laxly few-flowered. Fr. dry and inflated when ripe. Texas; Arizona.

Berberis pruinosa. (*G. and F.* 1896, 67.) H. A dwarf shrub the new growth, the underside of the l. and the abundant berries being all pure white, and the flowers sulphur-yellow. Yunnan, China.

Berberis Thunbergii. (*B. M.* t. 6646.) H. A species of dwarf bushy habit. Spines simple. L. tufted, ½–1 in. long, spathulate obovate, entire. Fl. solitary, pendulous, pale yellow tinged with red. Japan.

Berberis virescens. (*B. M.* t. 7116.) The correct name for the plant cultivated in the gardens as *B. beltaniana*.

Berchemia racemosa. (*H. G.* 1888, 287.) Rhamnaceæ. H. climbing shr. with oblong or oblong ovate subacute l., and terminal panicles of small fl., succeeded by dark brown berries. Japan; China.

Bertolonia × Sonerila. (*Lind. Cat.* 1896, 7, ff.) Melastomaceæ. S. Several varieties of a hybrid between *Bertolonia* and *Sonerila* are here described and figured and called *Bertonerila*.

Bertolonia ænea. (*H. and P.* 1882, 26.) Melastomaceæ. S. A dwarf shr. with ornamental foliage. L. cordate-ovate, 7-nerved, ciliate, olive-green with a silvery central bar, the young ones coppery. Garden hybrid.

Bertolonia vittata. (*Bull Cat.* 1880, 3.) S. Stem dwarf. L. ovate-oblong, velvety, olive green; the midrib marked out by a band of burnished silver, side ribs with a dotted line of the same. Fl. rose colour. Garden hybrid.

Beschorneria bracteata. (*B. M.* t. 6641.) Amaryllidaceæ. G. Much like *B. tubiflora*, but with larger bracts and greener fl. Mexico.

Beschorneria decosteriana. (*B. M.* t. 6768.) G. This is one of the finest of the genus, having broadly linear-lanceolate thick l. 2–2½ ft. long. and about 2 in. broad. Flower-stem 6–8 ft. high. panicled above. Fl. in clusters of 2 or 3 scattered along the branches of the panicle. Perianth 1½ in. long, tubular, green, with reddish-brown stripes at the base of the segments. Mexico.

Beschorneria dubia. (*R. H.* 1877. 153-156.) G. Closely resembling and probably only a var. of *B. tubiflora*. L. very glaucous, entire unarmed. Fl. greenish, with the tips slightly recurving. Mexico.

Besleria Imray. (*B. M.* t. 6341.) Gesneraceæ. S. Herb, erect and glabrous. Stems obtusely 4-angled. L. opposite, sub-sessile, broadly lanceolate, acuminate, serrate, deep green. Fl. in axiliary clusters: pedicels short: calyx green, with a short inflated tube twice as long as calyx, with a gibbosity on the under side of the apex; limb of 5 short rounded spreading lobes. Dominica.

Betula Maximowiczii. (*G. C.* 1894. xvi. 718.) Cupuliferæ. H. A handsome Japanese tree. It has large l. and orange-coloured bark. Japan; Mandshuria.

Betula Medwediewi. (*G. H.* 1887, 383, f. 95, 1-4: *Gfl.* 1887, 384, f.) H. Tree with glabrous branches and elliptic-ovate acutely-toothed glabrous l., with the midrib beneath and the petiole pubescent. Catkins cylindric; male about 1¼ in. long; female shorter. Transcaucasia.

Betula papyracea occidentalis. (*H. G.* 1888, 558.) H. shr., said to differ from the typical form by its deciduous bark, and larger and thicker l., which are shining above. It comes true from seed. North-west America.

Betula pumila Grayi. (*Engros-Cat. des Nat. Arb. Zösch.* 1890, 19.) H. shr. with roundish shining green l. [Probably not the *B. Grayi*, Regel, which has the young l. and shoots densely pubescent]. British Columbia.

Betula pumila × lenta. (*G. and F.* 1895, 243, f. 36.) H. Hybrids between the two species named have originated in the Arnold Arboretum, U.S.A., and figures of one are given at the place quoted.

Betula raddeana. (*Gfl.* 1887, 383, f. 95, 5–11.) H. tree, with the young shoots softly pubescent. L. small, ovate, acutely toothed, pubescent beneath on the nerves and in the angles of the nerves. Catkins ovoid-oblong, ¾-1 in. long. Caucasus.

Biarum Spruneri. (*B. T. O.* 1894. 19.) Araceæ. H. H. Nearly allied to the South European *B. tenuiflorum*. Greece.

Bifrenaria Charlesworthii. (*K. B.* 1894, 184.) Orchidaceæ. G. Allied to *B. racemosa*. Pseudobulbs 4-angled, 1½ in. long; l. 9 in. long; scape 6 in. long, bearing about six fl.; fl. about ¾ in. long and coloured yellow, with a few red-brown spots on the lip. Brazil.

Bifrenaria Hadwenii bella. (*G. C.* 1881. xv. 9.) S. Sep. and pet. almost entirely light yellow outside, shining cinnamon inside, with a few spots, bars and marks of a pale sulphur-colour. Lip broad, white, with one light brown spot behind and a larger one in front of the callus; lateral lobes with radiating brown lines; front lobe with mauve lines. [*Scuticaria Hadwenii*, Hort. var. *bella*, Reichb. f.]

—— Var. **pardalina.** (*G. C.* 1880, xiv. 812.) S. A var. having the sep. and pet. marked with brown circles or polygonal figures on a light yellow ground. Lip light ochre at the base, white in front, with radiating mauve-purple streaks. [*Scuticaria Hadwenii*, Hort. var.]

Bifrenaria Harrisoniæ alba. (*Gfl.* 1889, 651, t. 1312, f. 2.) G. A var. with the sep. white tipped with pale red, the pet. ivory-white, and the lip yellow veined with purple on the side lobes, and the front lobe white veined with rose-red.

—— Var. **buchaniana.** (*G. C.* 1879. xi. 430.) G. Base of sep. light green; pet. marked with violet-purple, and a deeper yellow lip.

Bifrenaria mellicolor. (*G. C.* 1878, ix. 622.) G. Something in the way of *B. Harrisoniæ*, with honey-coloured fl., striped with red. The spur is long and thin and bent backwards: lip with a depressed emarginate callus at the base of the front lobe. Brazil.

Bignonia capreolata atrosanguinea. (*B. M.* t. 6501.) Bignoniaceæ. G. climber. Fl. dark red-purple. Southern United States.

Bignonia magnifica. (*G. C.* 1879, xii. 72, f. 9; *Bull Cut.* 1879, 4. t. 4.) S. climber, with simple ovate acuminate l., and large panicles of fl. 3–3½ in. in diam., ranging from delicate mauve to rich purplish crimson, with a pale yellow throat. Colombia.

Bignonia regalis. (*Bull Cut.* 1885. 13.) S. A showy climber with opposite elliptic lanceolate-acuminate l. and very large fl. of a bright yellow and red colour.

Bignonia rodigasiana. (*Ill. H.* 1893. t. 183.) S. Foliage with bright green ground colour variegated with white, and tinted with rosy red when young.

Bignonia rugosa. (*B. M.* t. 7124.) S. A climber covered with soft hairs; l. bifoliate; fl. in axillary cymes; calyx broad, urn-shaped; corolla funnel-shaped, yellow with a creamy white limb. Venezuela.

Bignonia sambucifolia. (*R. H.* 1878. 50.) S. [This is the old and well-known *Tecoma stans.*]

Billbergia andegavensis. (*R. H.* 1886, 309.) Bromeliaceæ. S. A garden hybrid between *B. thyrsoidea* and *B. moreliana.*

Billbergia Bakeri. (*B. H.* 1880, 166. t. 8.) S. This is the plant figured in B. M. t. 6342 as *B. pallescens.*

Billbergia Binoti. (*J. H. F.* 1896. 724.) S. Near *B. speciosa.* L. in a rosette, deep green above, lower portion tinted with reddish-purple, under surface light green lined with white. Infl. pendulous; its axis and bracts red. Organ Mountains, Brazil.

Billbergia blireiana. (*R. H.* 1889. 139.) S. Garden hybrid between *B. nutans* and *B. iridifolia.*

Billbergia breauteana. (*R. H.* 1884. 117, 1888, 300, f.) S. A garden hybrid between *B. pallescens* and *B. zittata.*

Billbergia Bruanti. (*R. H.* 1885. 152.) S. A garden hybrid between *B. pallescens* and *B. decora.*

Billbergia Cappei. (*B. H.* 1885, 192.) S. Garden hybrid.

Bilbergia Chantini. (*R. H.* 1878, 112, f. 22; 1880, 272, f. 54–56.) S. Fl.-stem elevated above the l., branched above. Bracts bright red. Fl. sub-distichous, much projecting, red at the base, yellow at the apex.

Billbergia Enderi. (*Gfl.* t. 1217.) S. L. 12–16 in. long, 1½–2 in. broad, ascending. Fl.-stem longer than the l.; sheaths and bracts bright coral-red. Spike short, few-flowered. fl. ¾ in. long, blue. Brazil.

Billbergia gireoudiana. (*Gfl.* 1887, 330.) S. Garden hybrid.

Billbergia glazioviana. (*Gfl.* t. 1203.) S. This has a few broad ascending l., very concave on the face, and clasping each other at the basal part, spiny on the margins, blackish green marked with silvery zones beneath. Fl.-stem shorter than the l., with a short dense ovate-oblong spike of red fl., with white floccose bracts and calyces. Brazil.

Billbergia intermedia. (*Gfl.* 1891. 563, f. 101.) S. A garden hybrid between *B. nutans* and *B. zittata.*

Billbergia krameriana. (*Gfl.* 1888, 657.) S. Garden hybrid.

Billbergia leodiensis. (*Gfl.* 1891, 563, f. 100.) S. A garden hybrid between *B. zittata* and *B. nutans.*

Billbergia Lietzei. (*B. H.* 1881, 97. t. 5–7.) S. bromeliad with 5–10 lorate acute spinulose green l., and a slender somewhat flexuose spike; bracts and sep. rosy: pet. green with violet tips. There is a var. *chlorantha* having the sep. and pet. entirely green. Brazil.

Billbergia perringiana. (*Gfl.* 1890, 145, t. 1318.) S. A garden hybrid between *B. nutans* and *B. liboniana.*

Billbergia quintusiana. (*Gfl.* 1890, 202, f. 49.) S. Something in the way of *B. Saundersii*, but with larger l., which are of a clearer green, not coloured brown beneath and with fewer bars and spots; and the fl.-spike is thicker and erect, not drooping. Bracts carmine-red. Fl. with a greenish calyx tinged with rose and green; pet. tipped with blue. Brazil.

Billbergia Rancougnei. (*R. H.* 1884. 524.) S. A garden hybrid between *B. liboniana* and a species which was not identified.

Billbergia rhodocyanea purpurea. (*R. H.* 1883, 453.) S. This plant is distinguished from the type in having all its parts red instead of light green.

Billbergia roseo-marginata. (*R. H.* 1880, 70, t.) S. A showy species of robust habit, with broad l. 2 ft. long, marked with transverse mealy bands and with spine-toothed margins. Scape 1 ft. or more high, clothed with large imbricating brownish bracts. Infl. a dense oblong spike of light blue fl., subtended by large broad deep rose-coloured bracts, with scarious margins. Also known as *B. rubro-marginata*, and *Quesnelia roseo-marginata*.

Billbergia sanderiana. (*B. H.* 1884, 17, tt. 1–2.) S. A plant with erect broad green coriaceous obtuse mucronate l., armed with stout spines on the margins. Panicle pendulous; bracts rosy, with 1–3 fl. to each. Fl. 2 in. long; calyx and corolla green, tipped with blue. Brazil.

Billbergia speciosa. (*B. H.* 1877, 10.) S. L. long and broad, gracefully arching, obtuse; margins serrulate. Scape 1½ ft. high, stout, mealy; bracts large, carmine-rose; umbel many-flowered; calyx and corolla carmine, the pet. bordered with violet. Brazil.

Billbergia thyrsoidea splendida. (*R. H.* 1883, 300, t.) S. A handsome form with large scarlet bracts and fl., the latter tipped with violet. Brazil.

Billbergia variegata. (*B. H.* 1881, 73.) S. In the way of *B. pallescens*, but taller, being about 2 ft. high, with broad l. Panicle about 8 in. long. Bracts vermilion-red. Sep. pale green shaded with rose, indigo-blue at the tips. Pet. pale green with indigo-blue tips. Brazil.

Billbergia vexillaria. (*R. H.* 1889, 467, f. 118 t.) S. Garden hybrid between *B. thyrsoidea splendida* and *B. moreliana*.

Billbergia vittata Rohani. (*Gfl.* 1890, 306, f. 60.) S. Undistinguishable from the type.

Billbergia Windii. (*G. C.* 1883, xx. 791: *B. H.* 1885, 250.) S. A hybrid between *B. nutans* and *B. baraquiniana*.

Billbergia Windii. (*Gfl.* 1889, 7, f. 3–5.) S. A garden hybrid between *B. nutans* and *B. decora*.

Billbergia wittmackiana. (*Gfl.* 1891, 328, f. 69.) S. A garden hybrid between *B. vittata* and *B. amæna*.

Billbergia worleana. (*B. H.* 1885, 249.) S. A garden hybrid between *B. nutans* and *B. moreliana*.

Biota orientalis laxenburgensis. (*W. G.* 1888, 475.) Coniferæ. H. Garden variety. [*Thuja orientalis*, Linn. var.]

Biota pyramidalis compacta. (*R. H.* 1886, 34.). H. A garden var. of compact narrow conical growth.

Bismarckia nobilis. (*Gfl.* t. 1221.) Palmæ. S. An ornamental palm, of somewhat the aspect of a *Pritchardia*, the large l. being digitately divided into 8 to 10 long linear segments and several drooping thread-like ones. Madagascar.

Blechnum rugosum. (*G. C.* 1884, xxi. 408.) Filices. G. Fronds linear-lanceolate, acuminate, pinnate, 1 ft. long, rugose, and covered with glandular hairs; pinnæ oblong, obtuse or acute, falcate.

Blechnum Spicant aitkenianum. (*Fl. and P.* 1882, 36.) H. A dwarf evergreen fern of robust habit, the surface slightly corrugated, the apex densely crested. Clare Island, Ireland.

— Var. **obovatum.** (*Fl. and P.* 1882, 106.) H. A curious form with ovate pinnæ. Azores.

Bletia godseffiana. (*G. C.* 1893, xiii. 442.) Orchidaceæ. S. Apparently a var. of *B. verecunda*, R. Br., differing only in having smaller flowers. Brazil?

Bletia reflexa. (*O. R.* 1895, 6.) G. Plant 1 ft. high; l. grass-like ⅛ in. broad; fl. 1¼ in. long, purple; the lip veined with brown, its keels white. Mexico.

Bocconia microcarpa. (*Gard.* 1896, l. 197.) Papaveraceæ. H. Attaining the height of 9 ft. The infl. forms a plume-like panicle, not unlike the Venetian Sumach. North China.

Bollea cœlestis. (*G. C.* 1876, v. 756.) Orchidaceæ. G. Fl. large, 4–5 in. in diameter; sep. and pet. light blue at base, deep blue in their widest part, tips white; lip yellow at base, apical

portion blackish-violet. [*Zygopetalum cæleste*, Reichb. f.] Tropical South America.

Bollea hemixantha. (*G. C.* 1888, iv. 206; and *H. G.* 1888, 458.) G. [*Zygopetalum hemixanthum*, Reichb. f.]

Bollea lawrenceana. (*G. C.* 1878, x. 266.) G. A handsome plant, with fl. as large as those of *B. cælestis*. Sep. and pet. acute, milk-white with yellow tips; lip with a large bright yellow callus, towards the apex dark violet, white on each side of the callus. [*Zygopetalum lawrenceanum*, Reichb. f.]

Bollea pallens. (*G. C.* 1881, xv. 462.) G. Sep. and pet. light mauve with greenish yellow tips; the basal inner borders of the lateral sepals cinnamon-coloured, their lower halves being light yellow. Lip light ochre, with orange-coloured callus painted with brownish purple. [It is to be referred to *Zygopetalum*.]

Bollea pulvinaris. (*L.* ii. 29, t. 61.) G. This does not appear to differ from *Zygopetalum cæleste*, Reichb. f.

Bollea schrœderiana. (*G. C.* 1895, xvii. 401, 70.) G. Fl. fragrant, wax-like, pure white with the exception of the peculiarly formed lip, which is of a rose-pink colour. Andes of Colombia. [It is to be referred to *Zygopetalum*.]

Bollea wendlandiana. (*G. and F.* 1883, i. 315.) G. [*Zygopetalum Wendlandi*, Reichb. f.]

Bomarea acutifolia ehrhenbergiana. (*B. M.* t. 6444.) Amaryllidaceæ. G. L. rather large, oblong, acute. Umbels terminal, with from 15–20 fl. 1–1¼ in. long: outer segments bright red, inner ones yellow dotted with dark brown. Mexico; Guatemala.

Bomarea bredemeyeriana. (*Fl. des S.* t. 2316.) G. climber, with oblong-lanceolate acute l., and terminal umbels of orange-yellow fl. spotted with dark crimson-brown. Pedicels and ovary hairy: perianth funnel-shaped, about 1 in. long. Venezuela.

Bomarea Carderi. (*G. C.* 1876, v. 795.) G. L. 7 in. long, 2¾ in. broad, oblong-lanceolate, acuminate, on a twisted petiole, so that the under side becomes the uppermost. Fl. 4–6 in a pendulous umbel on long spreading peduncles, bell-shaped, rose-coloured, the three inner segments spotted with purplish-brown. Colombia.

Bomarea conferta. (*G. C.* 1881, xvi. 330.) G. [*B. patacocensis*, Herb.]

Bomarea frondea. (*G. C.* 1882, xvii. 668, 669, f. 102; *Fl. and P.* 1882, 106; *B. M.* t. 7247.) G. Resembling *B. caldasiana*, but leafy up to the base of the infl.: the l. immediately beneath the fl. smaller and reflexed. The fl. are in a large dense umbel, bright light yellow, the inner segments dotted with brown. Colombia.

Bomarea Kalbreyeri. (*G. C.* 1883, xix. 693; *R. H.* 1883, 516, f.) G. A species with orange fl. Colombia.

Bomarea oligantha. (*G. C.* 1877, viii. 648.) G. climber, with oblong acute l., about 2 in. long, membranous, bright green, ciliated on the nerves beneath. Fl. 1–2 to an umbel: pedicels 1 in. long, glabrous. Perianth funnel-shaped, 1 in. long; outer segments shorter than the inner, reddish outside, yellow within, unspotted; inner segments bright yellow, spotted with claret-brown. Peru.

Bomarea patacocensis. (*B. M.* t. 6692; *Fl. and P.* 1883, 107.) G. climber, with pubescent purplish brown stems, lanceolate acuminate l., and large umbels of bright carmine-rose fl., 2 in. long, the shorter outer segments with a dusky-green spot at the apex. Ecuador.

Bomarea Shuttleworthii. (*G. C.* 1882, xvii. 76, 77, f. 11, 85, f. 14; *Fl. and P.* 1882, 26.) S. A distinct species, with glabrous ovate-lanceolate l., 5–6 in. long, 2 in. broad. Infl. with 5–9 umbellate 2–3-flowered peduncles: pedicels as long as the fl. or longer. Perianth 2 in. long; segments subequal; outer ones orange-scarlet, tinged with green and marked with some small dark dots at the tips; inner ones yellow with a red midrib, the tips greenish with dark dots Colombia.

Bomarea sororia. (*Ill. H.* 1892, t. 145.) G. Resembling *B. edulis*, with ovate acuminate l., pubescent beneath, and lax umbels of about 20 fl., having the outer segments a little shorter than the inner ones, rosy spotted with carmine, the inner segments green spotted with brown. South America.

Bomarea vitellina. (*G. C.* 1882, xvii. 143, 151, f. 26 ; *Fl. and P.* 1882, 36.) G. A showy species, with branched umbellate peduncles and large orange-yellow fl. with unequal segments, the outer ones being much shorter and narrower than the inner. Colombia.

Bomarea Williamsiæ. (*G. C.* 1882, xviii. 553 ; *Fl. and P.* 1882, 180.) S. per. A handsome species, with slender furrowed angular glabrous stems, lanceolate very acute glabrous l., and large umbels of compound cymes of rose-coloured fl., dotted with dark purple, funnel-shaped, 2 in. long : ovary puberulous. Colombia.

Boronia elatior. (*B. M.* t. 6285.) Rutaceæ. G. shrub of slender twiggy habit and floriferous character, more or less clothed with long soft spreading hairs. L. rather closely set, subdistichous on the flowering branches, 1–2 in. long, ½–¾ in. broad, pinnate ; pinnæ 2–6 pairs with an odd one, linear, acute, flat, serrulate. Fl. numerous along the branches, drooping, somewhat globose, red-brown. Australia.

Boronia heterophylla brevipes. (*B. M.* t. 6845.) G. shr. with variable opposite l., sometimes simple and linear, sometimes pinnate, with 1 to 2 pairs of linear acute leaflets. Fl. 2 to 4 in a whorl, drooping, globose, bright red, ¼ in. in diam., on pedicels about ⅛ in. long. In the typical form they are much longer. South-west Australia.

Bouchea pseudogervao. (*B. M.* t. 6221.) Verbenaceæ. G. annual herb, nearly glabrous, with a square stem 2–5 ft. high. L. opposite, ovate acuminate, narrowed into the petiole, coarsely serrate, rich green. Fl. in erect slender terminal spikes ; corolla with a slender curved tube, twice as long as the calyx, and a broad spreading 5-lobed limb, 1½ in. in diameter, purple ; the throat of tube white. Brazil.

Bougainvillea glabra sanderiana. (*Sand. Cat.* 1895 ; *V. G. M.* 1894, 273, f.) Nyctaginaceæ. S. A floriferous variety.

Bougainvillea refulgens. (*Bull Cat.* 1887, 9.) S. climber. A form with large brilliant purple-mauve bracts. Brazil.

Bougainvillea speciosa variegata. (*Williams' Cat.* 1890, 24 ; *W. G.* 1890, 351.) G. or S. A form with variegated foliage.

Boussingaultia cordata. (*B. T. C.* 1895, 207.) Chenopodiaceæ. G. A succulent per. climber nearly allied to *B. baselloides*. Peru.

Bouvardia Humboldtii corymbiflora. (*R. H.* 1879, 30.) Rubiaceæ. G. Sweet-smelling shr. L. 2–2½ in. long, 1 in. broad, lanceolate, acuminate. Fl. white in small terminal corymbs, shortly pedicellate. Corolla tube slender, 2 in. long, limb of four spreading elliptic oblong lobes, each about ½ in. long.

Bouvardia luteola plena. (*W. G.* 1888, 157.) G. Garden variety.

Bouvardia scabra. (*G. C.* 1884, xxi. 44.) G. A dwarf free-flowering species with terete hairy stems and distant whorls of ovate-acuminate l., subscabrous on both surfaces, and dense corymbose cymes of bright pink flowers. Mexico.

Bowenia spectabilis serrulata. (*Fl. and P.* 1878, 107 ; *Bull Cat.* 1878, 4, t. 5.) Cycadaceæ. S. Cycad with large bipinnate l., on long slender roundish dark green petioles ; leaflets obliquely lanceolate, acuminate, serrate. Australia.

Brachychilum Horsfieldii. (*G. C.* 1894, xv. 652.) Scitamineæ. S. Stems erect, 2 ft. long ; l. oblong-lanceolate nearly 1 ft. long ; fl. in a terminal spike, yellow. Java.

Brachyspatha variabilis. (*G. C.* 1876, vi. 680, ff. 129, 130.) Araceæ. S. per. with tuberous rootstock, producing one fine l. about 2 ft. high and 18–20 in. broad : the petiole is biternately divided at the apex, the divisions are again deeply pinnatisect or almost pinnate, the leaflets being lanceolate-acuminate, green. Spathe very acuminate, greenish-purple, many-nerved, half as long as the whitish spadix, the basal third of which bears female fl., the rest being entirely male. [*Amorphophallus variabilis*, Benth.] Java.

Brachystelma caffrum. (*G. C.* 1894, xvi. 62.) Asclepiadaceæ. G. A small trailer with a tuberous rootstock, stems

5 in. long, ovate l. less than 1 in. long, and fl. ½ in. in diameter: corolla rotate, yellow. South Africa.

Brahea nitida. (*B. H.* 1887, 344, f. 67–70.) Palmæ. G. palm with large fan-like palmatifid glaucous-green l.: and very large much branched glabrous spadices. Fr. small, about the size of a pea, black. Mexico.

Brahea Roezlii. (*B.H.* 1883, 102.) G. A palm with silvery-blue fan-shaped l. California. [*Erythea armata*, S. Wats.]

Brassia antherotes. (*G.C.* 1879, xii. 782; *F. O. A.* t. 159.) Orchidaceæ. G. Fl. rich yellow, the odd sep. and the pet. purple-stained at base, the others are blotched with blackish purple. Lip with a callus at the base, velvety inside. Mexico?

Brassia bicolor. (*L.* viii. t. 378.) G. Nearly allied to *B. Wageneri*. It has large yellow and purple fls., the sep. being 2½ in. long, the pet. 2 in. long, the lip patent and acuminate. Peru.

Brassia caudata hieroglyphica. (*Ill. H.* 1881 t. 410.) G. A distinct var. having the yellow sep. and pet. irregularly barred with cinnamon-brown. Mexico.

Brassia cryptophthalma. (*G.C.* 1879, xii. 554.) G. A pretty species, with dark purple stem, and a dense raceme of yellow fl. The upper part of the sep. blackish violet inside. Lip deep yellow, with dark blotches. Peru.

Brassia elegantula. (*G.C.* 1885, xxiv. 616.) G. A small-flowered species, with glaucous pseudobulbs and l. Raceme 2- to 5-flowered: sep. spreading, green with brown bars. Lip oblong, apiculate, with two keels, hairy inside, white, with purple-brown dots in front of the calli. Mexico.

Brassia euodes. (*G.C.* 1880, xiii. 680.) G. Sep. and pet. brownish red, with yellow tips. Fl. very sweet-scented. Colombia.

Brassia keiliana tristis. (*F. O. A.* viii. t. 347; *G.C.* 1888, iv, 411.) G. A var. with deep amber-brown sep. and pet., and a lemon-yellow lip with a semicircular series of brown spots at the base. Veneznela; Colombia.

Brassia Lewisii. (*O.R.* i, 199.) G. Near *B. lanceana*. It has oblong pseudobulbs, linear oblong l. 6 in. long, and a raceme about 9 in. long bearing 10–12 fl. greenish-yellow spotted with brown; lip pale yellow with white keels and orange marks.

Brassia signata. (*G. C.* 1881, xvi. 6.) G. Sep. and pet. green changing to yellow, with three brown lines at the base of the pet., and a single one at the base of the sep.: lip pandurate, cuspidate, with two keels, white with two or four purple central spots, two orange eyes on the base of the keels, and yellow in the disk underneath.

Bravoa bulliana. (*G. C.* 1884, xxii. 328.) Amaryllidaceæ. G. A distinct and remarkable plant with an ovoid bulb, clothed with the remains of the old l. which split into bristly fibres. L. few, lanceolate, bright green, about 6 in. long, and 1–1½ in. broad, rough at the edges. Flower-stem 2–3 ft. high, with a raceme of 5–6 pairs of curved fl. 1¼ in. long, whitish outside tinged with greenish purple, dull yellow inside. Mexico.

Briza rotundata. (*Gn.* 1887, 638, f. 158.) Gramineæ. H. annual. An ornamental grass with erect narrow acute l., and narrow panicles of erect spikelets. Mexico to Chili.

Briza spicata. (*Fl. and P.* 1882, 52.) H. annual, 8–12 in. high, having the ovate spikelets disposed in a narrow linear-oblong spike-like inflorescence. Greece: Asia Minor.

Brocchinia cordylinoides. (*G. C.* 1888, iv. 474.) Bromeliaceæ. S. A large terrestrial Bromeliad with a trunk growing to 15 ft. in height. L. in a dense terminal rosette, 3–4 ft. long, 6–8 in. broad, green, and obscurely scurfy on both sides, margins without prickles. Infl. a large panicle, 6–8 ft. long, bearing innumerable small yellowish fl. British Guiana.

Brodiæa Bridgesii. (*G. and F.* 1888, 125, f. 24.) Liliaceæ. G. L. linear. Umbel of 10–20 funnel-shaped blue fl., 1–1¼ in. long. California.

Brodiæa Douglasii. (*B. M.* t. 6907: *R. H.* 1887, 166.) G. [Syn. *Triteleia grandiflora*.]

Brodiæa grandiflora Warei. (*Gn.* 1886, 116.) G. A var. with lilac-rose fl. 3 in. long, and a fl.-stem 2 to 2½ ft. high. California.

Brodiæa Hendersoni. (*Gfl.* 1890, 425.) G. L. linear, 12–15 in. long. Scape of about the same length bearing an umbel of clear yellow fl. striped with green outside, and with violet-purple midribs; anthers bluish. Western North America.

Brodiæa Howellii. (*B. M.*, t. 6989; *G. C.* 1888, iii. 466.) G. A species, with two linear channelled bright green l., 10–12 in. long, and an umbel of 4–8 campanulate white or pale lilac fl., about ¾ in. in diam. Western United States.

—— Var. **lilacina.** (*Gard.* 1894, xlvi. 502, t. 992.) G. A var. with delicate lilac-tinted fl.

Brodiæa ixioides erecta. (*Gard.* 1896, xlix. 454.) G. A form with large umbels of bright yellow fl.

Brodiæa Orcuttii. (*G. C.* 1896, xx, 214, f. 40.) G. A species bearing umbels of 5–15 bright lilac fl. on a scape 1 ft. long. California.

Brodiæa Palmeri. (*G. and F.* 1889, 244, 107.) G. 1–2 ft. high; l. numerous, lanceolate-linear, very thin; fl. umbellate, 1 in. long, bright purple. It produces small bulbils in large quantity on the surface of the ground. Lower California.

Bromelia agavoides. (*R. H.* 1881, 31.) Bromeliaceæ. S. L. thick, coriaceous, gracefully arching, 20–30 in. long, attenuated towards the base, brownish-green, with black spines. Fl.-stem robust, leafy, elevated a little above the l. Bracts scarlet. Fl. in a dense spike, white tinted with violet.

Bromelia scarlatina. (*B. H.* 1881, 164.) S. [This is *Distiacanthus scarlatinus*, Linden.]

Brownea Ariza. (*B. M.* t. 6469.) Leguminosæ. S. tree. L. 1 ft. or more long, pinnate. Leaflets lanceolate acuminate. Fl. crimson-scarlet, very brilliant, forming dense globose heads 6 in. in diam. Colombia.

Brownea Crawfordii. (*G. C.* 1891, ix. 398.) S. A hybrid between *B. grandiceps* and *B. macrophylla*.

Brownleea cœrulea. (*B. M.* t. 7309.) Orchidaceæ. G. A terrestrial species, with a flat lobed tuber, erect annual stems each bearing two or three ovate green l. and an erect spike of pale blue fl. with violet dots and a long straight spur. South Africa.

Brugmansia aurea. (*Gfl.* 1893, 3.) Solanaceæ. G. In habit and foliage characters this does not differ from *Datura* (*Brugmansia*) *arborea*, but the fls. are golden yellow. Chili.

Brugmansia coccinea. (*Bull Cat.* 1876, 4.) G. shr. of free growth, with large bright scarlet fl. [This is a *Datura*.] Colombia.

Brunsvigia massaiana. (*Ill. H.* 1887, t. 19.) Amaryllidaceæ. S. [*Crinum massaianum*, Baker.]

Bryanthus Breweri. (*M. D. G.* 1896, 19.) Ericaceæ. H. A dwarf evergreen shr., with crowded narrow l., and short racemes of purple-red fl. California.

Bucklandia populnea. (*B. M.* t. 6507.) Hamamelidaceæ. G. In its young state this is an exceedingly ornamental evergreen shr. The large orbicular-cordate acuminate l. at first are purple with the course of the veins picked out with green, afterwards they are green with purple veins. The stipules are remarkable for concealing between them the terminal bud; they are obliquely obovate-oblong, purplish. Himalaya.

Buckleya distichophylla. (*G. and F.* iii. 237, f. 37.) Santalaceæ. H. A shr. 10–12 ft. high with slender graceful spreading branches, and light green delicate foliage; fl. and fr. inconspicuous. North America.

Buddleia asiatica. (*B. M.* t. 6323.) Loganiaceæ. G. floriferous shr. Young shoots, under side of l., and infl. clothed with a white or buff mealy tomentum. L. opposite. 4–8 in. long, lanceolate, acuminate, entire or serrulate. Fl. white, fragrant, in long slender drooping spikes; corolla salver-shaped, 4-lobed; stamens 4, included. East Indies.

Buddleia auriculata. (*G. C.* 1881, xvi. 632, 633, f. 129.) G. shr. L. opposite, petiolate, auriculate, lanceolate, acuminate, serrate, covered with greyish stellate hairs. Fl. cream-coloured, arranged in dense globular heads. South Africa.

Buddleia carnea. (*R. H.* 1879, 90.) G. shr. A var. of *B. japonica*, with pale lilac fl.

Buddleia Colvillei. (*G. C.* 1892, xi. 789; xii. 186, f. 32; *B. M.* t. 7449.) G. Not new to cultivation, but flowered for the first time in Europe, it is said, at Cork in 1891. It is a beautiful shrub, with loose bunches of rose-coloured bell-shaped fl. Himalaya.

Buddleia insignis. (*R. H.* 1878, 330, f. 76.) H. A garden form of *B. japonica*.

Buddleia pulchella. (*K. B.* 1894, 389.) G. It forms a compact bush 2 ft. high, covered with hastate or irregularly lobed l. 2 in. long and bearing short terminal panicles of small tubular yellowish-white fl. South Africa.

Buddleia reflexa. (*R. H.* 1879, 90, f. 18.) G. shr. A remarkable var. of *B. japonica* (?), with the branches strongly reflexed to the ground.

Bulbocodium Eichleri. (*Gfl.* t. 952.) Liliaceæ. H. plant with 3 linear channelled l., 6–8 in. long, much overtopping the fl. Perianth white, the segments with a very long claw and a sagittate-lanceolate blade: the claws connivent in a slender tube 2½–3½ in. long, the blade recurved. [*Merendera Eichleri*; Boiss.] Caucasus.

Bulbophyllum alopecurum. (*G. C.* 1880, xiv. 70.) Orchidaceæ. S. In the way of *B. triste*, with a dense nodding raceme of dark purple fl., which have concave equal sep. Burma.

Bulbophyllum anceps. (*L.* viii. t. 351.) S. Broad compressed pseudobulbs, oblong obtuse l., and lax racemes of moderate sized fl. Dorsal sep. and pet. yellowish dotted with purple: side sep. white striped with purple: lip purple. Borneo.

Bulbophyllum attenuatum. (*K. B.* 1896, 45.) S. Fl. scape 9 in. long, bearing purple fl. 1 in. across. Borneo.

Bulbophyllum Beccarii. (*G. C.* 1879, ix. 41; *Bull Cat.* 1879, 4; *B. M.* t. 6567.) S. A gigantic species with very stout climbing stem and enormous l. 2 ft. long by 1–1½ ft. broad, elliptic, obtuse, very thick. Fl. in dense nodding racemes, on very long pedicels, as large as those of *B. leopardinum*, light brown painted with violet, lip brown with violet hue; peduncle rosy with violet lines. Borneo.

Bulbophyllum Berenices. (*G. C.* 1880, xiv. 588.) S. A minute epiphyte, with creeping rhizome, bearing distant nearly pear-shaped pseudobulbs, ligulate cuneate l., and a miniature infl. like that of *Cirrhopetalum Medusæ*.

Bulbophyllum bowringianum. (*G. C.* 1881, xv. 814.) S. Pseudobulbs very small; l. solitary, oblong-ligulate, fleshy, dark green. Fl. in an elongate transverse raceme. Sepals ochre-white spotted and streaked with purple: pet. white with green tips and a dark red spot at their base: lip yellowish-green with small brown spots. Assam.

Bulbophyllum carinatum. (*J. O.* 1895, 216; *L.* xi. t. 495.) S. A handsome species nearly related to *B. reticulatum*, Bateman. Borneo.

Bulbophyllum comosum. (*Gard.* 1892, xli. 48; *J. of H.* 1892, xxiv, 141, f. 21; *B. M.* t. 7283.) S. A pretty little species with clustered *Pleione*-like pseudobulbs, fleshy deciduous l., and erect scapes 6 in. long, with abruptly reflexed dense racemes of white hairy fl., which develop after the l. have fallen. Burma.

Bulbophyllum cupreum flavum. (*G. C.* 1882, xvii. 330.) S. A var. with light yellow fl.

Bulbophyllum Dearei. (*Veitch Man. Deudr.* 95.) S. This is *Sarcopodium Dearei*, here referred to *Bulbophyllum*.

Bulbophyllum denticulatum. (*K. B.* 1891, 197.) S. A small species with the habit of *B. flavidum*. Sierra Leone.

Bulbophyllum disciflorum. (*K. B.* 1895, 7.) S. Pseudobulbs ovoid small, crowded one-leaved; l. 4 in. long; scape short, one flowered; fl. fleshy cupped, 1 in. across, greenish yellow, spotted with red brown: lip covered with purple-brown warts. [Now removed to the genus *Trias*.] Siam.

Bulbophyllum elegans. (*G. C.* 1892, xi. 764.) S. An attractive species with small ovoid pseudobulbs, crowded along the stems, narrow lanceolate l., and slender scapes bearing one fl. about 1 in. long, with broad rosy-purple sep., the upper one shorter and paler than the others. Ceylon.

Bulbophyllum Ericcsoni. (*G. C.* 1893, xiv, 522; 1897, xxi, 61, f.) S. It has a long creeping rhizome, thin erect pseudobulbs 5 in. high and *Stanhopea*-like leaves. The fls. are umbellate and each one is 9 in. across, including the tails; they are yellowish-white with brown spots.

Bulbophyllum fallax. (*G. C.* 1889, vi. 558.) S. An elegant little species, with a scape 8 in. long, bent acutely in the middle, and bearing small dark purple flowers. Assam.

Bulbophyllum grandiflorum. (*L.* iii. t. 108.) S. A grotesque-looking plant, more remarkable than beautiful, with a creeping rhizome, bearing distant four-angled pseudobulbs about 1 in. long, with one ellipitic l. about 2½–3 in. long, by 1½ in. broad, and very large solitary fl., densely reticulated with brown on a pale ground colour. Sep. lanceolate-attenuate, 4–5 in. long, free, the upper twice as broad as the lateral one, strongly arching over at the base and hanging down in front of the fl. [*B. longisepalum*, Rolfe, *O. R.* 1895, 104.] New Guinea.

Bulbophyllum grandiflorum. (*O. R.* 1895, 104.) S. A gigantic species. Rhizome creeping, pseudobulbs one-leaved; scapes 9 in. long, one-flowered; dorsal sep. 4½ in. by 2 in., greenish-brown with white blotches; lateral sep. 4 in. long, unspotted; pet. and lip small. New Guinea.

Bulbophyllum Hamelini. (*G. and F.* 1893, 336.) S. A remarkable plant with large flat shell-like pseudobulbs 4 in. in diameter, pressed against the thick rhizome, large l. and scapes 18 in. long showing numerous fl. scars. Fls. not seen. Madagascar.

Bulbophyllum hookerianum. (*G. C.* 1894, xv. 685.) S. A rather common-place *Bulbophyllum*, with creeping rhizome, oblong 4-angled pseudobulbs each bearing a pair of oblong l. 2 in. long; scape nodding, bearing small yellow fl. Tropical West Africa.

Bulbophyllum iners. (*G. C.* 1880, xiii. 776.) S. L. solitary, cuneate ligulate, acute, green above, purple beneath, very thick, 3 in. long and ¾ in. wide. Peduncle slender, red, bearing an umbel of small white fl. Assam.

Bulbophyllum inflatum. (*G. C.* 1891, ix. 234.) S. Allied to *B. comatum*. It has 4-angled pseudobulbs with one l. and a pendulous scape, bearing small greenish-yellow fl. Sierra Leone.

Bulbophyllum inops. (*G. C.* 1880, xiv. 620.) S. Resembling *B. recurvum*. L. green above, red beneath. Fl. in a few-flowered pendulous raceme, greenish with a purple lip.

Bulbophyllum Johannis. (*G. C.* 1894, xvi. 592.) S. Diminutive in all its characters; fl. white, ¼ in. in diameter. Madagascar.

Bulbophyllum khasyanum. (*G. C.* 1878, x. 716.) S. A species with very thick oblong petiolate l., a slender brownish-looking peduncle with one narrow sheath at its middle, bearing a dense raceme of very numerous fl. The single sep. is triangular, acuminate, ochre with three dark chocolate brown veins: lateral sep. connate, oblong, bifid at apex with 2 bristle-like points, nearly flat, each side with 3 broad dark purplish nerves. Pet. small, spathulate, apiculate, serrulate at apex. Lip fleshy, oblong, acute, with a small tooth on each side, from which 2 keels run obliquely to the centre. Khasia Hills.

Bulbophyllum lemniscatoides. (*G. C.* 1890, vii. 672.) S. Differs only from *B. lemniscatum*, in habit and in the structure of the appendages to the sepals. Java.

Bulbophyllum leysianum. (*O. R.* 1894, 294; *Proc. R. H. S.* 1894, xvii. 135, f.) S. Allied to *B. Dearei*, with large solitary fl. on scapes 6 in. long; dorsal sep. yellow with purple veins, lateral sep. connate, pink and purple. India.

Bulbophyllum longiscapum. (*K. B.* 1896, 45.) S. A species with ovoid pseudobulbs 1 in. long, linear-oblong l. 4 in. long, scapes over 1 ft. long and fl. 1 in. across, coloured light green with a red-purple lip. Fiji.

Bulbophyllum mandibulare. (*G. C.* 1882, xvii. 366.) S. A curious species. Pseudobulbs over 2 in. long, glaucous, compressed pyriform. L. cuneate-oblong acute, 8–9 in. long, 3–4 in. broad. Raceme on a slender peduncle, overtopping the l. Fl. brown, washed with light green; the pet. striped with purple; lip straw-yellow with purple prickles and marks. North-west Borneo.

Bulbophyllum nigripetalum (*K. B.* 1891, 197.) S. A small species with depressed-ovoid pseudobulbs bearing one l., and an erect subsecund fl.-spike. Fl. yellowish and purple-black. West Tropical Africa.

Bulbophyllum obrienianum. (*G. C.* 1892, xii. 332.) S. A species of the *Sarcopodium*-group, with a stout rhizome, ovoid one-leaved pseudobulbs and solitary fl. nearly 2 in. in diameter, yellow, with dark reddish-purple spots. Himalaya.

Bulbophyllum orthoglossum. (*G. C.* 1896, xix. 326.) S. A species allied to *B. mandibulare*, which it resembles in pseudobulbs, l., and fl., but they are only half as large. Fl. yellowish green with brown stripes, the lip purple. Sarangui Island.

Bulbophyllum Pahudi. (*Fl. des S.* 1877. t. 2268–9.) S. Creeping rhizome, giving off at intervals long erect pseudobulbs, bearing a single large oblong-lanceolate l., and umbels of large and handsome fl. Sep. and pet. all tailed; the upper sepal about 3 in. long, the rest about 2 in., reddish; the upper sep. much darker, brownish-red; labellum ovate, acuminate, about 1 in. long, deep brownish-red. Java.

Bulbophyllum perpusillum. (*G. C.* 1894, xvi. 592.) S. The creeping stems are thinner than ordinary silk thread; the pseudobulbs and l. are one to two lines in length, and the l. about half a line in breadth. Madagascar.

Bulbophyllum Psychoon. (*G. C.* 1878, x. 170.) S. Pseudobulbs pear-shaped, covered with keels and furrows. Fl. umbellate, pellucid green: pet. with toothed margins. Assam.

Bulbophyllum pteriphilum. (*K. B.* 1894, 391.) S. A species with elongated rhizomes, small oblong pseudobulbs, and linear oblong l.; scape 4 in. long, bearing numerous distichous small white fl. Penang.

Bulbophyllum racemosum. (*K. B.* 1893, 61.) S. Allied to *B. anceps*. It has suborbicular pseudobulbs 1 in. long, each bearing a leathery linear-oblong leaf 4½ in. long; scape 6 in. long: fls. ¾ in. long, yellowish spotted with maroon, the lip purple with black dots near the tip. Borneo.

Bulbophyllum sanderianum. (*K. B.* 1893, 4.) S. Allied to *B. meridense*. It has short, four-angled, monophyllous pseudobulbs and long racemes of green fl. spotted with brown, the lip hairy and purple-brown. Pernambuco, Brazil.

Bulbophyllum saurocephalum. (*G. C.* 1886, xxvi. 262.) S. A curious and interesting species, with 4- to 5-angled one-leaved pseudobulbs, and a thick clavate bright red stem, loaded with odd-looking fl. Sep. light ochre, with brown nerves. Pet. small, white, with reddish mid-line and borders. Lip ochre, with a deep purple base. Philippine Islands.

Bulbophyllum sillemianum. (*G. C.* 1884, xxii. 166.) S. An elegant creeping species with nearly spherical pseudobulbs and cuneate ligulate acute l. Sep. and pet. short and somewhat orange; lip mauve above, whitish beneath, cordate at the base, pentagonal, with a reflexed apex. Burma.

Bulbophyllum spathaceum. (*K. B.* 1893, 170.) S. Allied to *B. apodum*, but with shorter l. and a denser raceme; fl. small, light straw-yellow, the lip brighter. Burma.

Bulbophyllum suavissimum. (*G. C.* 1889, v. 297.) S. A diminutive species, with arching racemes of small pale yellow fl. Upper Burma.

Bulbophyllum tremulum. (*G. C.* 1896, xix. 593.) S. Pseudobulbs subglobose; l. ovate-lanceolate 2 in. long; raceme 6 in. long bearing a few fl. Fl. 1½ in. in diameter, white with red-purple lines and lip, the latter fringed with long hairs. Nilghiri Hills.

Bulbophyllum viride. (*K. B.* 1893, 170.) S. Allied to *B. intertextum*, with small pseudobulbs and l.; scape 3 in. long; fl. small, green, with two purple eye-like spots at the base of the lip. West Tropical Africa.

Bulbophyllum vitiense. (*K. B.* 1893, 4.) S. A species with a creeping rhizome, small 4 angled monophyllous pseudobulbs, and racemes 6 in. long, clothed with small whitish and pink fl. Fiji.

Burbidgea nitida. (*B. M.* t. 6463; *G. C.* 1879, xii. 401, f. 63.) Scitamineæ. S. A beautiful plant, with tufted stems 2–4 ft. high, elliptic-lanceolate cuspidate-acuminate bright green l., and lax heads of bright orange-scarlet fl. Calyx membranous, tubular, truncate, obscurely 2-toothed, ⅓ as long as

corolla-tube, which is about 1½–2 in. long; segments spreading about 1 in. long, the dorsal one elliptic, the lateral one oblong, obtuse; lip erect with a long claw and a small oblong bifid blade; ovary pubescent, 3 celled, cells many-ovuled. Borneo.

Burlingtonia caloplectron. (*Williams' Cat.* 1887, 21.) Orchidaceæ. G. A species with small oblong two-edged pseudobulbs, with solitary thick lanceolate l. and pendulous few-flowered racemes of rose-coloured fl., about the size of those of *B. fragrans*.

Buxus decussata. (*B. H.* 1878, 200.) Euphorbiaceæ. H. A var. of *B. sempervirens* with sub-decussate l., which are more or less attenuated at their base.

Cabomba aquatica. (*B. M.* t. 7090.) Nymphæaceæ. S. A small plant, with dimorphic l., the submerged much divided, and the floating ones entire, circular and peltate. The fl. are small, yellow. Tropical America.

Cadia ellisiana. (*B. M.* t. 6685; *Fl. and P.* 1883, 75.) Leguminosæ. S. shr. A remarkable plant with regular rose-pink fl. 1½ in. long, more resembling those of an *Abutilon* than of a leguminous plant. L. pinnate, leaflets alternate, lanceolate, acute. Madagascar.

Cæsalpinia bicolor. (*K. B.* 1896, 22.) Leguminosæ. S. Tree 20 ft. high: branches thorny; l. bipinnate; fl. red-purple; and fruit a flat broad pod 2 in. long. Yields a very fine Brazil-wood, valuable for dying purposes. South America.

Cæsalpinia japonica. (*G. C.* 1888, iv. 513, f. 73.) H. shr. producing long shoots armed with hooked prickles. L. bipinnate, prickly along the main petiole; leaflets oblong obtuse. Fl. in terminal racemes, bright yellow, about ¾ in. in diam. Japan.

Caladium adamantinum. (*Ill. H.* 1891, t. 132.) Araceæ. S. L. deflexed, sagittate, dark green with white venation, and with numerous white dots along the borders of the veins. Peru.

Caladium lilliputianum. (*Ill. H.* 1895, 186.) S. Apparently a var. of *C. argyrites*. [At p. 363 of the work above quoted this plant is described and figured under the name of *C. lilliputiense*, Rodigas.] Venezuela.

Caladium medioradiatum. (*Ill. H.* 1891, t. 128.) S. L. peltate, ovate, acute, notched at the base, of a dark green with the course of the midrib and its two branches silvery white: the petiole is mottled with brown. Colombia.

Caladium rubescens. (*G. C.* 1893, xiv. 86.) S. Leaf-blade 6 in. by 2 in., ovate-lanceolate, wavy, with short basal lobes, crimson, margined with green. Spathe 3½ in. long, green with a black stripe. Brazil.

Caladium sagittatum. (*Ill. H.* 1891, t. 138.) S. L. narrow, sagittate, deeply bilobed behind, dark green with the midrib and its lower branches feathered with red. Brazil.

Caladium venosum. (*G. C.* 1893, xiv. 87.) S. Leaf-blade 10 in. long, 4 in. broad, green, with yellowish nerves and a red margin. Spathe 3 in. long, green. Brazil.

Calampelis scabra rosea. (*G. C.* 1891, x. 672.) Bignoniaceæ. H. An orange-red-flowered variety of the well-known *Eccremocarpus scaber*.

Calamus asperrimus. (*Ill. H.* 1877, t. 273.) Palmæ. S. climber. L. long, erect, becoming recurved, regularly pinnate; pinnæ linear-lanceolate, flat, bright green; stipes thickly beset with stout straight spreading dark brown spines. Java.

Calamus gracillimus. (*G. C.* 1893, xiii. 475.) S. Leaflets very narrow, linear, elongated, spaced at wide distances apart.

Calamus grandis. (*Ill. H.* 1895, 223.) S. See under *Acanthophœnix grandis*.

Calamus guineensis. (*Bull Cat.* 1884, 11.) S. Palm with pinnate l., having narrow lanceolate segments supported by spiny leaf-stalks. Young l. cinnamon brown, changing to deep green. Sikkim.

Calamus kentiæformis. (*Cat. Comp. Cont. d'Hort.* 1884, 3.) S. In habit recalling at once the form and character of *Kentia fosteriana*.

Calamus lewisianus. (*Ill. H.* 1877, 294.) S. palm. Petiole armed with brown, sub-verticillate spines; blade elliptic, pinnate; pinnæ numerous, linear-lanceolate, acuminate, flat, sub-opposite, bright green. Java.

Calamus Lindeni. (*Lind. Cat.* 1883, 2.) S. Palm with spiny petioles to the ovate-oblong pinnate l.; leaflets linear-lanceolate, acute, bright green above, white beneath.

Calamus Regis. (*Cat. Comp. Cont. d'Hort.* 1886, 8.) S. L. shining green, with a mealy petiole. New Guinea.

Calamus robustus. (*Ill. H.* 1893, t. 169.) S. Leaf-stalks broadly amplexicaul, spiny, with brownish-black membranous margins: spines yellowish-green, disposed in rings of six or eight. Pinnæ ensiform, crowded. Borneo.

Calamus spectabilis. (*Williams' Cat.* 1886, 23.) S. Small-growing, somewhat spiny, with slender pinnate l.

Calamus subangulatus. (*Bull Cat.* 1882, 13.) S. palm, which has, in the young state, green prickly stems and bifid l., with three rows of spines on the leafstalks. East Indies.

Calamus trinervis. (*Bull Cat.* 1883, 12). S. Petioles thorny, with a deciduous scale-like tomentum, the sheath ending in a fringe of pointed brown scales. L. pinnate: leaflets alternate, lanceolate, sessile, acuminate, having three prominent hairy nerves, the two marginal and two intermediate ones less developed, transverse veins conspicuous. East Indies.

Calandrinia oppositifolia. (*G. C.* 1888, iv. 601, f. 83.) Portulacaceæ. H. per. herb. with tuberous rootstock, oblanceolate fleshy l., 2–3 in. long, and a fl. stem 3–10 in. high, bearing a few handsome fl. over 1 in. in diam., either white or pink; the pet. are 9–11 in number, and toothed at the apex. Oregon.

Calanthe albata. (*G. C.* 1896, xx. 602). Orchidaceæ. S. A garden hybrid between *C. veratrifolia* and *C. Cooksoni*.

Calanthe anchorifera. (*G. C.* 1883, xx. 166). S. In the way of *C. veratrifolia*, having the same habit of leaf, hairy peduncle and short velvety bracts; fl. whitish-ochre; pet. very small; front lobe of lip bent like an anchor. Polynesia.

Calanthe barberiana. (*G. C.* 1881, xv. 136.) S. A garden hybrid between *C. vestita* and *C. Turneri*.

Calanthe bella. (*G. C.* 1881, xv. 234.) S. A garden hybrid between *C. Veitchii* and *C. Turneri*.

Calanthe biloba. (*W. O.*, t. viii. t. 378.) S. An evergreen species, with elongated stems, bearing several large lanceolate acute l., and a long-stalked raceme of many fl. Sep. and pet. oblong-lanceolate, acuminate, purplish, tinged with yellow-brown; lip bilobed, purple, streaked with white. Sikkim.

Calanthe bracteosa. (*G. C.* 1882, xviii. 712.) S. L. glabrous, oblong, acuminate, on long petioles. Peduncle hairy, with a rich raceme of white fl., having large bracts; the ovary, outside of sep., and spur pubescent. Samoa.

Calanthe burfordiense. (*R.* t. 63.) S. A garden hybrid, supposed to be between *C. Veitchii* and *C. vestita rubro-oculata*.

Calanthe Ceciliæ. (*G. C.* 1885, xix. 432.) S. Near *C. parviflora*, but with obtuse sep. and pet. Fl. light ochre, tinged with purple; calli of the lip deep yellow. Malay Peninsula.

Calanthe colorans. (*G. C.* 1885, xxiv. 360; *W. O. A.* t. 218.) S. Raceme elongate, pyramidal with white fl.: the lip at length becoming ochre with yellow calli; spur shorter than the ovary, bidentate at the apex.

Calanthe Cooksonii. (*Sand. Cat.* 1896, 3.) S. A garden hybrid with white fl.; parentage not stated.

Calanthe Curtisii. (*G. C.* 1884, xxii. 262.) S. L. long, petiolate, cuneate-oblong, acute; infl. lax; fl. white with red borders and tinted with rose outside; lip yellow with a purple callus. Sunda Islands.

Calanthe darblayana. (*O.* 1889, 178, t.; *Gard.* 1889, xxxv. 228.) S. A garden hybrid between *C. Regnieri* and *C. vestita* var. *grandiflora* (var. *gigantea*).

Calanthe Dipteryx. (*G. C.* 1884, xxii. 394.) S. Allied to *C. pleiochroma*, but differing in the very wide and very low front lobe of the lip, curved on the outside towards the column. Callus deep purple, consisting of 3 rows of numerous narrow tubercles. Outside of fl. downy. Sunda Islands.

Calanthe Eyermanii. (*G. and F.* iv. 16, f. 3). S. A hybrid between *C. restita* and *C. Veitchii.*

Calanthe Færstermanni. (*G. C.* 1883, xix. 814.) S. A large-leaved species with a rich infl. of yellow fl. Sep. and pet. oblong, acute; lip reniform; spur clavate. Burma.

Calanthe Gigas. (*G. C.* 1893, xiii. 80; *J. of H.* xxvi. 129, f. 24.) S. A garden hybrid between *C. sanderiana* var. *gigantea* and *C. vestita* var. *gigantea.*

Calanthe Halli. (*W. G.* 1888, 108.) S. Garden hybrid.

Calanthe Langei. (*G. C.* 1885, xxiv. 679.) S. L. elongate lanceolate growing to 2 ft. long and 2½ in. broad. Scape shorter than the l.; raceme 3–4 in. long; fl. numerous, crowded, deep yellow: dorsal sep. ovate, acute; lateral sep. lanceolate; pet. ovate, acute: lip spathulate-obovate, apiculate, with minute deltoid side lobes, and two slight elevations at the base. New Caledonia.

Calanthe laucheana. (*Sand. Cat.* 1895, 8.) S. A garden hybrid between *C. sanderiana* and *C. veratrifolia.*

Calanthe lentiginosa. (*G. C.* 1883, xix. 44.) S. A garden hybrid between *C. labrosa* and *C. Veitchii.*

Calanthe masuco-tricarinata. (*G. C.* 1895, xvii. 210.) S. A garden hybrid between the two species indicated by the name.

Calanthe Mylesii. (*W. O. A.* t. 402: *Williams' Cat.* 1890, 25.) S. A garden hybrid between *C. niralis* and *C. Veitchii.* Fl. pure white.

Calanthe natalensis. (*G. C.* 1885, xxiv. 78, 136: *B. M.* t. 6844.) S. L. broad lanceolate, acute, plicate. Scape tall with a lax many-flowered raceme of pale lilac fl., the lip changing to salmon colour. Sep. and pet. ovate-lanceolate, acute. Lip with spreading oblong side lobes, and an obcordate front lobe: spur 1 in. long, curved. Natal.

Calanthe Petri. (*G. C.* 1880, xiv. 326.) S. Like *C. veratrifolia*, excepting that the l. are narrower, and that it has a system of five curious sulcate yellowish calli on the base of the lip, and is without the single lamella and teeth of that species. Polynesia.

Calanthe porphyrea. (*G. C.* 1884, xxi. 76.) S. A hybrid between *Lematodes labrosa* and *Calanthe vestita rubro-oculata.*

Calanthe proboscidea. (*G. C.* 1884, xxi. 476.) S. Allied to *C. furcata*, but distinguished by having the column bent down in a curve. Lip bent upwards, 4-lobed; spur hairy, curved. Fl. white with vermilion calli. Sunda Islands.

Calanthe Regnieri. (*G. C.* 1883, xix. 274; *Fl. and P.* 1883, 41.) S. Somewhat like *C. Turneri*, but with only one cuneate truncate emarginate body on the lip; the fl. are 2 in. across, white with a purple-crimson lip and column, and a darker line up the middle of the pet.: spur yellowish-green. [*C. vestita*, Lindl. var. *Regnieri.*] Cochin China.

—— Var. **fausta.** (*G. C.* 1884, xxii. 776.) S. Column and base of the lip rich purple.

Calanthe rubens. (*G. C.* 1890, vii. 576.) S. Allied to *C. vestita.* Fl. numerous, and lasting a long time. The scapes are 2 ft. long, and each bear about 12 rose-coloured flowers. Malay Peninsula.

Calanthe sanderiana. (*Williams' Cat.* 1887, 21.) S. Fl. in long many-flowered racemes, deep rose-coloured, having a bright crimson lip, similar to that of *C. veratrifolia Regnieri* in shape. Cochin China. [*C. vestita*, Lindl., var.]

Calanthe sanderiana. (*G. C.* 1892, xii. 396.) S. It is allied to *C. natalensis*, but with larger fl. and a deeper coloured lip. L. lanceolate, petiolate, 20 in. long, 4 in. broad, scapes 2 ft. long, bearing numerous fl. [Quite distinct from *C. sanderiana*, Williams, which is a var. of *C. vestita.*] East Tropical Africa.

Calanthe sandhurstiana. (*G. C.* 1881, xv. 395.) S. Var. or hybrid of *C. Veitchii* with an eye-spot on the lip.

Calanthe sanguinaria. (*G. C.* 1886, xxv. 331.) S. Garden hybrid.

Calanthe Sedeni. (*G. C.* 1878, ix. 168.) S. Garden hybrid. between *C. vestita rubro-oculata* and *C. Veitchii.*

Calanthe stevensiana. (*Fl. and P* 1883, 42.) S. Species with stout-jointed greyish pseudobulbs, and erect hairy 8–10-flowered scapes: fl. white

with a rosy-purple spot on the lip; as the fl. become older they change to buff. Cochin China.

Calanthe striata. (*B. M.* t. 7026: *G. C.* 1888, iii. 364, iv. 573.) G. This is cultivated as *C. Sieboldii*. The plicate l. are broadly lanceolate, acute, 6–10 in. long. Fl. stem 18 in. high; raceme lax. Fl. 1½ in. in diam. Sep. and pet. oblong, acute, yellow outside, brownish inside. Lip light yellow, deeply 3-lobed, the middle lobe being again shortly 2-lobed, and having 3 ridges which are raised into tubercles at their apex and near their base. Japan.

Calanthe sylvatica. (*G. C.* 1881, xiv. 812.) S. Fl. white, changing to bright yellow before fading. Madagascar.

Calanthe Textori. (*G. C.* 1879, xii. 70.) G. In the way of *C. pleiochroma*, but with a very narrow lip. Fl. at first cream-white washed with violet on pet., column and base of lip, where there are two brick-red calli; afterwards changing to ochre, except the lilac base of pet., sep., and the column. Japan.

Calanthe Veitchii alba. (*G. C.* 1890, vii. 132.) S. Fl. pure white.

Calanthe veratrifolia macroloba. (*G. C.* 1878, ix. 690.) S. A vigorous form, with the basilar lobes of the fl. exceedingly tall and broad, and with the lateral calli well developed. Pacific Islands.

—— Var. **Regnieri.** (*G. C.* 1887, ii. 70.) S. A var. with white sep. and pet., and a light ochre lip, with diverging nearly semi-lunate side lobes. [Syn. *C. Regnieri*, Reichb. f.] Cochin China.

Calanthe vestita Fournieri. (*G. C.* 1892, xi. 488.) S. A var. with smaller fl. than the type. Borneo.

—— Var. **igneo-oculata.** (*G. C.* 1876, v. 534.) S. A fine var. with the base of the column purplish, the upper part of the column and lip of dazzling fire-colour. Borneo.

—— Var. **oculata gigantea.** (*W. O. A.* t. 211.) S. A fine form, with large ovoid obtusely angled pseudobulbs, broad lanceolate acute l., and a hairy raceme of handsome white fl. about 3 in. in diam., marked with a fiery-red blotch on the base of the lip; the under side of the base of the lip and the much-curved spur orange-coloured. Borneo.

Calanthe vestita oweniana. (*W. O. A.* t. 464.) S. A garden hybrid between *C. vestita* and *C. Veitchii*.

—— Var. **Williamsii.** (*W. O. A.* t. 134.) S. A var. with white sep. and pet. striped and edged with crimson, and a bright magenta-crimson lip.

Calanthe Victoria-regina. (*B.* t. 63.) S. A garden hybrid supposed to be between *C. Veitchii* and *C. rosea*.

Calathea cyclophora. (*A. B.* 1895, 17.) Scitamineæ. S. Allied to *C. zebrina*, but the l. are green and the fl. white. British Guiana.

Calathea leopardina. (*Gfl.* t. 893.) S. A reference to its proper genus of *Maranta leopardina*. Brazil.

Calathea medio-picta. (*Gfl.* t. 934.) S. L. oblong, acute, of a dark green, with a feathered white stripe along the midrib. Fl. pale purple, in a rounded bracteate head; bracts large, roundish, white. Brazil.

Calathea polytricha. (*G. C.* 1894, xvi. 467.) S. Allied to *C. flavescens*, but with hairy l. and bracts. Tubers globose: l. green. Fl. many in a rosette, sessile in the centre of the tuft of l. Trinidad.

Calathea tæniosa. (*B. H.* 1876 t. 5.) S. Petiole 1 ft. or more long, purple-brown, with a green sheath; blade obliquely ovate-cordate, 1 ft. or more long, 4 in. broad, deep green above, pinnately banded with light green, pale green beneath. Fl. on very short radical scapes, white. Brazil.

Calathea undulata. (*Gfl.* t. 852.) S. *Maranta undulata* of gardens.

Calceolaria alba. (*G. M.* 1895, xxxviii. 486.) Scrophulariaceæ. H. H. Shr., with linear toothed l. and dense panicles of pure white fl. Chili.

Calceolaria andina. (*B. M.* t. 7326; *G. C.* 1893, xiv. 594.) G. An undershrub, with broadly-stalked oblong-ovate rugose l. and terminal panicles of yellow fl. Chilian Andes.

Calceolaria arachnoideo-crenatiflora. (*H. G.* 1888, 401.) G. Garden hybrid.

Calceolaria Burbidgei. (*G. C.* 1886, xxvi. 464.) G. Garden hybrid.

Calceolaria deflexa. (*B. M.* t. 6431.) G. Shr. L. petiolate, ovate, acute, 2–2½ in. long: margin serrate, bright green above, whitish beneath. Fl. in a large lax panicle, bright yellow, corolla 1 in. across, the lips nearly equal, the upper one crenulate. [Not *C. deflexa*, Ruiz & Pav.] Peru.

Calceolaria lobata. (*B. M.* t. 6330.) G. Glandular-pubescent herb. L. cordate-deltoid, 5–7-lobed; lobes unequally toothed; fl. in lax terminal cymes; corolla with the lower lip remarkably inrolled, pale clear yellow, spotted with purple-red inside. Peru; Bolivia.

Calceolaria Sinclairii. (*B. M.* t. 6597.) G. 1–2 ft. high, with petiolate oblong toothed l. Fl. white, spotted with purple in terminal paniculate cymes. Corolla subcampanulate, two-lipped. New Zealand.

Calceolaria suffruticosa. (*R. H.* 1889, 93.) G. Garden variety.

Calceolaria tenella. (*B. M.* t. 6231.) H. Dwarf per. herb Branches and infl. clothed with a viscid pubescence. L. closely set, opposite, nearly or quite sessile, ¼–⅓ in. long, broadly-ovate, subacute, entire or crenate; corymbs lax, few-flowered, terminal. Fl. ½ in. long, golden yellow; with a few linear red spots; lower lip inside. Chili.

Calendula officinalis ochroleuca. (*Fl. and P.* 1882, 26.) Compositæ. H. A form with double yellowish-white fl.-heads.

Calimeris Alberti. (*Gfl.* t. 1152, f. 2, e–g.) Compositæ. H. per. with ascending branching stems, alternate linear acute l., ½ to 1¼ in. long, and terminal solitary light-purple radiate heads, 1 in. in diam. Turkestan.

Caliphruria hartwegiana. (*B. M.* t. 6259.) Amaryllidaceæ. S. bulb. L. about 4, contemporary with the fl., oblong-spathulate, acute, bright green, glabrous, distinctly petioled. Scape terete, 1 ft. long, bearing an umbel of 6–8 fl., which are white with a green tube, and about 1 in. in diameter. Filaments, broad, flat, with a long tooth on each side. Colombia.

Caliphruria subedentata. (*B. M.* t. 6289.) S. Bulb ovoid, 1½ in. in diameter, brown. L. about 4 to a bulb, contemporary with the fl.; petiole about 1 ft. long, channelled down the face; blade elliptic, bluntly pointed, 6–8 in. long, 3–4½ in. broad, bright green: petiole and midrib very pale green. Scape 18 in. long, slightly compressed, umbellately 6–8-flowered. Fl. pedicellate, 1½ in. in diameter: tube about ½ in. long, rather slender, greenish; segments of the limb ovate-oblong, very spreading, white. Anthers yellow. [*Eucharis subedentata*, Benth.] Colombia.

Calliandra tergemina. (*G. C.* 1887, ii. 366.) Leguminosæ. S. shr., with pinnate grey-green l., zig-zag branches, and globose heads of white fl., having the filaments tipped with red. Tropical America.

Callirhoe pedata compacta. (*Gfl.* t. 1224.) Malvaceæ. H. per. A dwarf variety.

Callithauma viridiflorum Elwesii. (*G. C.* 1878, ix. 756.) Amaryllidaceæ. G. bulb. A var. with the corona shorter than the perianth-segments, slit a third to half way down into 6 quadrate lobes, which are emarginate or 3-toothed. [*Stenomesson viridiflorum*, Benth. var. *Elwesii*, Baker.]

Calochortus amœnus. (*G. C.* 1892, xii. 11.) Liliaceæ. H. H. Intermediate in habit between *C. alba* and *C. pulchella*. Fl. deep rosy-pink, or purple. L. lanceolate.

Calochortus Benthami. (*B. M.* t. 6475.) H. H. Stem 6–12 in. high, with one linear l. 6–12 in. long, and 3–6 fl. in a lax corymb. Perianth 1 in. in diameter; outer segments lemon-yellow, oblong-ovate, acute; inner segments sub-orbicular, orange-yellow, clothed on the face with glandular hairs, and having a claret-brown spot at the base of each. California.

Calochortus Howellii. (*G. and F.* iii. 348.) H. H. Fl. white, 1 in. broad, and with a dark brown beard on the lower half of the inner segments. Oregon.

Calochortus Kennedyi. (*B. M.* t. 7264; *Gard.* 1892, xlii. 15.) H. H. Fl. bright scarlet, the black spots near base being surrounded with bristles. L. linear. California.

Calochortus longibarbatus. (*G. and F.* iii. 324.) H. H. Stems 1 ft. high with 1-3 pale purple fl. 1½ in. in diam., with a dark purple stripe across the base of each segment and a beard 1 in. long above it. Oregon and Washington.

Calochortus luteus concolor. (*Gard.* 1895. xlviii. 440, t. 1043.) H. H. Much branched, 1 ft. high, and bearing numbers of rich yellow fl., slightly marked with chestnut-red at the base of the segments.

Calochortus Lyoni. (*Gard.* 1895, xlvii. 426.) H. H. Fl. large, pale lilac, shading to white, with dark brown blotches at the base. California?

Calochortus madrensis. (*G. C.* 1890, viii. 391, f. 78.) H. H. Fl. bright orange-yellow fl. with a band of deep orange hairs at the base of each segment; l. linear.

Calochortus nitidus. (*Gard.* 1896, l. 11.) H. H. Fl. mauve with a blotch of indigo-blue on each segment; bearded at the base. California.

Calochortus obispoensis. (*G. and F.* 1889, 160, f. 101.) H. H. Stems sparingly branched, 1-2 ft. high. L. narrow, acute, convolute. Sep. orange and purple on a greenish yellow ground. Pet. shorter, terminating abruptly, and usually cleft at the apex, ground colour lemon-yellow, orange towards base, tips reddish-brown, and covered with long delicate hairs of darker tint. Anthers of different shades of orange: filaments purplish. California.

Calochortus Plummeræ. (*G. C.* 1894, xvi. 133, 21.) H. H. Fl. of a delicate shade of lilac. California.

Calochortus venustus brachysepalus. (*Gfl.* t. 865.) H. H. Sep. shorter by ⅓ than the pet. Pet. not overlapping, white, with a yellow base. Across the base is a bar of red, broadest at the middle, and bearing a dark brown spot on its lower edge; base covered with deep rose-coloured hairs. California.

—— Var. **lilacinus.** (*G. C.* 1877, viii. 70.) H. H. Sep. and pet. lilac, each with a round red-brown blotch bordered with yellow, and some brownish markings above; lower half of pet. grained with claret-colour; above the narrow claw is a crescent-shaped cushion of reddish-brown hairs.

Calochortus venustus pictus. (*Gard.* 1895, xlvii. 465.) H. H. A var. with smaller fl. than the type. Fl. white with rosy spots at the base, and a brown blotch on each segment. California.

—— Var. **purpureus.** (*G. C.* 1877, viii. 72.) H. H. Like *lilacinus*, but of a brilliant purple-lilac colour, and with the blotch much broader than long.

—— Var. **roseus.** (*Gfl.* 1886, 116.) H. H. A var. with short bluish-green l., and the fl. white inside with a distinct red spot on each segment, and purple-rose outside.

Calochortus Weedii. (*G. C.* 1894. xvi. 183, f. 27.) H. H. This is placed by Mr. Baker as a var. of *C. luteus*. The fl. are rich yellow, the whole surface being covered with long brownish hairs. California.

Calonyction sanguinolentum. (*R. H.* 1880, 20.) Convolvulaceæ. S. tuberous per., producing annual twining robust villous stems. L. large, cordate, thick, and strongly nerved. Peduncles axillary, many-flowered. Fl. rose-coloured, with the interior of the tube blood-red.

Calophaca grandiflora. (*Gfl.* 1886, t. 1231.) Leguminosæ. H. shr. L. imparipinnate with 10 to 13 pairs of elliptic-oblong puberulous leaflets. Peduncles axillary 6-8 in. long, laxly racemose and glandular hairy in the upper half: fl. about 1 in. long, bright yellow, calyx deeply 5-lobed, the lobes lanceolate-acute. Eastern Bochara, Turkestan.

Calopogon multiflorus. (*G. C.* 1884, xxi, 338.) Orchidaceæ. G. Fl. in a slender raceme, amethyst-purple with a rich tuft of yellow hairy lamellæ on the front lobe of the lip.

Calpicarpum ornatum. (*Bull Cat.* 1884, 12.) Apocynaceæ. S. An evergreen shrub, with large oblong-lanceolate l. of a fine glossy green, Fl. white, with a red centre, salver-shaped. Panicles corymbose. Ceram.

Calpurnia lasiogyne. (*G. C.* 1890, vii. 389.) Leguminosæ. G. A small tree with the habit, l., and fl. of Laburnum. Known in Natal as "Natal Laburnum."

Calyptrogyne teres. (*Bull Cat.* 1882, 13.) Palmæ. S. With smooth terete green petioles, and spreading or drooping bright green l., which in young plants are composed of two pairs of linear-oblong acuminate leaflets. British Guiana.

Calyptronoma Swartzii. (*Bull Cat.* 1878, 4.) Palmæ. S. Trunk spineless. L. unequally pinnate; leaflets linear-acuminate, green, glabrous. Fl. and staminal tube as in *Geonoma*. Fr. sub-angular, 1-seeded. Jamaica.

Camaridium lawrencianum. (*K. B.* 1894, 185.) Orchidaceæ. S. Allied to *C. purpuratum*, from which it differs in having pseudobulbs 1 in. long; the l. narrow, 3 in. long. Fl. borne singly on axillary peduncles, ½ in. long, yellowish-white spotted with purple the lip being dark purple.

Camarotis cochinchinensis. (*G. C.* 1876, vi. 740.) Orchidaceæ. S. epiphyte with small racemes of unattractive fl. L. rather narrow, linear-ligulate, bilobed at apex. Fl. glutinous, yellowish; sep. striped outside over the middle nerves with brown, and spotted with yellow under the column. Cochin China.

Camassia Cusickii. (*G. and F.* 1888, 172, 174, f. 32.) Liliaceæ. H. Bulbs large, clustered: l. glaucous, slightly wavy, 1½–2 ft. long, 1½ in. broad, and fl.-stem leafy, 2–3 ft. high, bearing a long moderately dense raceme of very pale blue fl. 1½ in. in diam., with narrow oblanceolate obtuse segments. Oregon.

Camassia Engelmannii. (*B. T. C.* 1889, 101.) H. Bulb very much larger than in the rest of the genus. L. 8–12 in. long, about 1½ in. broad, glaucous above. Fl. bright blue in a lax raceme, the perianth segments not so distinctly nerved as in the other species. Rocky Mountains.

Camassia esculenta Leichtlinii. (*B. M.* t. 6287.) Correct name for plant cultivated as *Chlorogalum Leichtlinii*.

Cambessedesia paraguayensis. (*B. M.* t. 6604.) Melastomaceæ. G. per., with woody rootstock, producing numerous annual square leafy stems, 1 ft. high. L. sessile, elliptic, acute, ¾ in. long, dark green. Fl. ¾ in. in diam., bright rose-red, arranged in cymose panicles. Paraguay.

Camoensia maxima. (*Bull Cat.* 1885, 13. 5. f.; *B. M.* t. 7572.) Leguminosæ. S. climber with trifoliolate l., having elliptic-acuminate leaflets, and fl. in drooping axillary racemes; calyx 6–7 in. long; pet. about 4 in. long, white, frilled at the margin, where they are tinted with golden yellow. Angola.

Campanula Allionii. (*B. M.* t. 6588.) Campanulaceæ. H. per. of dwarf habit. L. subrosulate, linear, 1–2 in. long, hairy. Fl. nodding, large, bright violet-blue. Europe.

Campanula balchinensis. (*Gard.* 1896, 1. 217.) H. A garden hybrid between *C. fragilis* and *C. isophylla alba*.

Campanula excisa. (*G. C.* 1891. ix. 340; *B. M.* t. 7358.) H. Resembling *C. tommasiniana*. Fl. funnel-shaped, with notches between the lobes. Switzerland.

Campanula fragilis. (*B. M.* t. 6504.) H. per. A pubescent herbaceous plant, 6–10 in. high, with petioled broadly-ovate coarsely-toothed l., and laxly racemose bright blue fl. Cor. 5-lobed, spreading out nearly flat, 1½ in. in diameter. South Italy.

Campanula glomerata dahurica. (*W. G.* 1888, 283, f. 55.) H. per. Seems only to be a dwarf form.

Campanula Grosseckii. (*Gfl.* 1886, 476. 477. f. 55.) H. per. A large plant, with leafy stems 2½ ft. high, branching at the base and ending in a long raceme of large bell-shaped violet fl. The large l. are cordate-lanceolate, acuminate, with coarsely-toothed margins. Eastern Europe.

Campanula Jacobæa. (*B. M.* t. 6703.) G. per. Hairy; stems angular; l. 1½–2 in. long, subsessile or sessile, ovate-oblong or oblong, subacute; fl. axillary, solitary on rather long pedicels, nodding, campanulate, 1 in. long, purple or pale green. Cape Verd Islands.

Campanula mirabilis. (*G. C.* 1895, xviii. 616.) H. Allied to *C. Medium*. Caucasus.

Campanula persicifolia coronata. (*Gfl.* 1885, 370.) H. per. A var. with double white flowers.

Campanula Regina. (*G. C.* 1896, xix. 648.) H. [*C. mirabilis*. Alboff.]

Campanula sibirica eximia. (*R. H.* 1881, 420.) H. biennial, with long scabrous l., and a much-branched fl.-stem, with narrow campanulate fl., varying from pale blue to violet. North Europe.

Campanula tommasiniana. (*B. M.* t. 6590.) H. per. Quite glabrous. Stems 6–10 in. high, slender, leafy. L. narrow lanceolate, acuminate, serrate, 1–2 in. long. Fl. numerous, racemose. narrow, campanulate, 8 9 lines long, pale blue. Istria.

Campanula Van-Houttei. (*R. H.* 1878, 420.) H. herb like *C. nobilis*, with ovate-lanceolate l., 3-4 in. long, 1–1½ in. broad, dentate, villous: the radical ones on long petioles: cauline sessile. Fl. very large, deep blue, solitary and pendent at the end of slender axillary branchlets. Garden variety (?).

Campanula Wanneri. (*Gfl.* 1887, 444, f. 112.) H. alpine plant, about 6 in. high, pubescent. L. lanceolate, acute, dentate, the lower ones stalked. Fl. from the axils of the stem-l., pedunculate: calyx-lobes lanceolate, acute; corolla blue, 1 in. long, erect, campanulate, with very short broad lobes. [*Symphyandra Wanneri*, Heuff. *B. M.* t. 7594.] South Austria.

Campylobotrys Ghiesbrechtii variegata. (*Ill. H.* 1883, t. 498.) Rubiaceæ. S. L. variegated with white, rose and various shades of green; purple beneath.

Canarium vitiense. (*Gfl.* 1887, 71.) Burseraceæ. S. A small tree with pinnate l., having 5–7 oblong-elliptic obtuse leaflets, and panicles of small yellowish-white fl., succeeded by bluish-black fruit. Fiji.

Canavalia Lunareti. (*R. H.* 1881, 236, ff. 56, 57.) Leguminosæ. H. annual (?) A vigorous climber, with large trifoliolate l., and few-flowered racemes of large rose-coloured fl. Pod about 10 in. long and 2 in. broad, very thick. Japan (?)

Canistrum aurantiacum. (*R. H.* 1877, 246.) Bromeliaceæ. S. per. with numerous long broad l., spinescent on the margins, crisped towards apex, bright shining green, faintly zoned. Scape stout, bracteate, raised 1 ft. or more above the l.: bracts striate with red. Fl. tubular, yellow, in a dense flat-topped head, involucred by the bracts. [*Æchmea aurantiaca*, Baker.] South America.

Canistrum eburneum. (*B. H.* 1879 117, 168, t. 13, 14.) S. L. very spreading, 2½ ft. long, 4 in. broad. Infl. subsessile. Fl. numerous, green and white, surrounded by a kind of involucre of ivory white bracts. Also known as *Guzmannia fragrans*, and *Nidularium Lindeni*. [*Echmea eburnea*, Baker.] Tropical America.

Canistrum roseum. (*B. H.* 1879 301: 1883, 195, tt. 14–15.) S. Resembling *C. eburneum*, but the infl. is borne on a stout stem about 6 in. long, covered with a fulvous tomentum; and the involucral bracts are of a delicate rose colour. The calyx is white and the corolla green. [*Echmea rosea*, Baker.] Tropical America.

Canna grandiflora picta. (*R. H.* 1885, 396, t.) Scitamineæ. G. A robust plant, with yellow fl. spotted with red. Garden variety.

Canna indica Bertini. (*R. H.* 1889, 95.) G. Garden variety.

Canna iridiflora hybrida. (*F. and P.* 1879, 129.) G. A garden var. with elliptic acute l. and large crimson flowers.

Canna Noutonni. (*R. H.* 1878, 439.) G. Garden hybrid between *C. iridiflora* and *C. Bihorelli*.

Canna rosæflora. (*R. H.* 1885, 396. t.) G. Fl. magenta red. Garden variety. [Several other garden Cannas are described at the place above quoted.]

Caragana pendula. (*R. H.* 1887, 298.) Leguminosæ. H. shr. Garden var. of *C. arborescens*.

Caraguata andreana. (*R. H.* 1884, 247, f. 61; 1886, 276, t.; *B. M.* t. 7014.) Bromeliaceæ. S. L. in a lax rosette, arching, 2 ft. long by 2 in. broad. Panicle rather lax, longer than the l., with the stem and bracts carmine-rose. The numerous fl. are about 2 in. long. Calyx and corolla bright yellow. Andes of Pasto, Colombia.

Caraguata angustifolia. (*G. C.* 1884, xxii. 616; *B. M.* t. 7137.) S. Rosettes tufted; l. numerous, 6 in. long, ½ in. broad, tapering to a point, green, with red-brown veins, slightly lepidote beneath. Fl.-stem about as long as the l.: the lower bracts bright red, with a green point, the upper ones bright scarlet. Fl. 3–4 in an oblong spike, bright yellow. Colombia.

Caraguata beleana. (*R. H.* 1891, 114, f. 27.) S. per., with bright green acuminate l., 2–2½ ft. long, lepidote beneath, and a fl.-stem about 2 ft. high with a panicle of white fl.

Caraguata conifera. (*B. M.* t. 7359.) S. A near ally to *C. lingulata*, but larger in all its parts. It has a dense rosette of green l. 3 ft. long and 2 in. broad, and a central erect peduncle bearing a cone-like head 4 in. long of bright scarlet bracts enclosing the yellow tubular flowers. Ecuador.

Caraguata lingulata cardinalis. (*Ill. H.* 1880, t. 374.) S. L. 1½ ft. long, ligulate, recurved. Scape 1–1½ ft. high, surmounted by a crown of brilliant scarlet-red spreading bracts tipped with green, the innermost ones yellow. The fl. are sessile, white. [*C. cardinalis*, Linden.] Colombia.

Caraguata morreniana. (*R. H.* 1887, 12, t.; *G. C.* 1887, i. 251.) S. A plant with a large rosette of l. 16–20 in. long. by 2 in. broad, with recurved acuminate tips; the outer ones dark green, gradually passing, by being shaded and tinted with violet, into the violaceous floral l. Fl.-stem 4–6 in. long, bearing a large compact head of yellow fl., with bright red bracts. Colombia.

Caraguata osyana. (*B. H.* 1885, 254. tt. 26–27.) S. Bromeliad with numerous spreading unarmed green l., 18 in. long by 2 in. broad, and a large dense subsessile central head of yellow fl. subtended by bright salmon-rose lanceolate acute bracts, with spreading tips. Ecuador.

Caraguata Peacockii. (*B. H.* 1885, 82.) S. Rosette of l. of a rose-purple colour beneath, bronzy-purple above. Fl.-stem covered with brighter purple bracts, the upper ones rolled round the white flowers.

Caraguata sanguinea. (*G. C.* 1883, xix. 693; *B. M.* t. 6765.) S. L. rose-coloured, surrounding the yellow flowers.

Caraguata Van-Volxemii. (*Ill. H.* 1878, t. 326.) S. Rosette of many spreading glabrous ligulate l. 20–28 in. long, 2–3 in. broad, green. Scape 2–3 ft. high; panicle narrow, spike-like, compact; flowering bracts bright rose; fl. yellowish, crowded on short ascending spikes. Colombia.

Caralluma campanulata. (*G. C.* 1892, xii. 369; *B. M.* t. 7274.) Asclepiadaceæ. S. succulent. A dwarf *Stapelia*-like plant, with 4-angled glabrous stems, and terminal umbels of star-shaped fl., 1 in. in diam., velvety brownish purple. Ceylon.

Caralluma Luntii. (*K. B.* 1894, 335.) S. Stems 4-angled smooth, 8 in. high and ¾ in. thick, conspicuously toothed, and marbled with purple. Fl. 1 in. in diameter, with a 5-lobed tube, coloured yellowish green with purple spots. South Arabia.

Carex gracilis. (*R. H.* 1892, 384.) Cyperaceæ. G. sedge with narrow bright green l., and narrow panicles of slender clustered spikes. [This may be *C. tristachya*, Thunb., known in gardens as *C. japonica*.] Japan; India; Australia.

Carex riparia variegata. (*R. H.* 1878, 400.) H. Var. with the l. striped with yellow and green.

Carex scaposa. (*B. M.* t. 6940; *G. C.* 1887, ii. 108.) G. or S. sedge, with broad lanceolate acute l., narrowed into a petiole at the base, and erect loose panicles of brownish red spikelets. South China.

Carludovica Caput-Medusæ. (*B. M.* t. 7118; *Gfl.* 1890, 539.) Cyclanthaceæ. S. with broad plicate lobed l., 5 to 7 ft. long, and heads of white filamentose flowers.

Carludovica Drudei. (*G. C.* 1877, viii. 714; 1879, xii. 279, f. 46.) S. per. of palm-like aspect. Petioles erect, 3 ft. long, terete, covered with a greyish mealy down. Blade fan-shaped, divided into four broad lobes. Infl. erect, cream-coloured, resembling a bottle-brush; the staminodes stiffish and widely spreading. Colombia.

Carludovica elegans. (*Williams' Cat.* 1889, 23. 21, f.) S. L. fan-like 3 ft. across, divided into four or five segments, which are again deeply divided into narrow segments.

Carludovica ensiformis. (*B. M.* t. 6418.) S. evergreen per. of dwarf tufted habit, with distichous l., the blade bisected nearly to base; the lobes ensiform, acute, flat, 4-nerved. Scape 3–4 in. long, with four whitish lanceolate acuminate deciduous spathes. Spike 1–1½ in. long, dense, white, with long pendulous filiform staminodes. Costa Rica.

Carludovica microcephala. (*B. M.* t. 7263.) S. A dwarf species with a short fleshy stem, narrow dark green plicate l. 1½ ft. long, split from the apex to below the middle: peduncle 4 in. long; sheaths 1 in. long; spadix 1 in. long, covered with pale yellow fl. and long white staminodes. Costa Rica.

Carludovica palmifolia. (*G. C.* 1889, vi. 250.) S. [*C. Plumieri.*]

Carludovica rotundifolia. (*B. M.* t. 7083.) S. Like *C. palmata*, but larger, and with a fl.-scape as large again. Costa Rica.

Carludovica Wallisii. (*Gfl.* t. 992.) S. Evergreen per. A dwarf species, with cuneate obovate plicate l., bifid to about half the way down. Scape much shorter than the petiole. Spadix cream-coloured, about 1 in. long, and ¾ in. broad. Staminodes about ¾ in. long, flexuous. Colombia.

Carmichælia muelleriana. (*Gfl.* 1887, 611.) Leguminosæ. G. shr., about 2 ft. high. Branches slender, compressed, pinnately branched: the branchlets filiform, compressed. L. with 1-3 small obovate emarginate leaflets, about ¼ in. long, on a rather longer petiole. Fl. solitary or in pairs in the axils of the l., small, whitish, striate with purple. New Zealand?

Carpenteria californica. (*R. H.* 1884, 365: *B. M.* t. 6911; *G. C.* 1886, xxvi. 103, f. 22.) Saxifragaceæ. G. shr. Stems tetragonous. L. opposite, elliptic-oblong, coriaceous, crenulate, dark green above, whitish beneath. Fl. large, white, sweet-scented, 2-3 in. in diam., in terminal cymes. California.

Carpinus japonica. (*Gfl.* 1889, 581: *G. and F.* 1893, 365, f.) Cupuliferæ. H. A tree with lanceolate-ovate long-pointed l., doubly serrate on the margin. Male catkins cylindric, with spreading ovate bracts. Female catkins large, ellipsoidal, with large toothed imbricate bracts. Japan.

Carrieria calycina. (*R. H.* 1896, 497, f. 170.) Bixaceæ. H. Tree attaining a height of about 50 ft., with the general aspect of *Idesia polycarpa*, but with a woody capsular fruit. China.

Carumbium polyandrum. (*Bull Cat.* 1876, 4.) Euphorbiaceæ. S. Shr. of erect growth, with glabrous terete stem. L. alternate, broadly ovate, clear glaucescent green above, rich vinous purple beneath; petioles purplish. Lord Howe's Island.

Caryopteris Mastachanthus. (*G. C.* 1884, xxi. 148, f. 30: *B. M.* t. 6799.) Verbenaceæ. H. Shr. with opposite oblong-ovate coarsely-toothed l., and axillary dense cymes of lavender-coloured bilabiate fl.; the lower lip toothed on the sides. Japan.

Caryota plumosa. (*Cat. Comp. Cont. d'Hort*, 1886, 8.) Palmæ. S.

Cassebeera triphylla. (*G. C.* 1888, iv. 501.) Filices. G. About 4 in. high, with black-stalked trifoliate fronds, the leaflets about 1½ in. long, and scarcely ¼ in. broad, crenulate, dark shining green. Sori in close rows along the margins. Brazil.

Cassia Barrenfieldii. (*Damm. Cat.* 1890–91, 76, 79, f. 46.) Leguminosæ. H. H. or G. per. [*C. australis*, Sims.]

Cassia coquimbensis. (*B. M.* t. 7002; *G. C.* 1888, iii. 722; *G. and F.* 1888, 275.) G. Shr. with pinnate l. and terminal corymbose racemes of bright yellow fl. 1–1½ in. in diam. L. 2-4 in. long; leaflets in 4–6 pairs, elliptic-oblong, mucronate. Upper pet. obcordate, rather larger than the rest, which are obovate. Pods stipitate, 3–4 in. long, ½ in. broad, flattened. Chili.

Cassia Reinwardtii. (*Damm. Cat.* 1890–91, 78.) H. H. or G. A synonym of *C. bicapsularis*, Linn.

Castanea vesca japonica. (*H. G.* 1889, 238: *Gfl.* 1889, 167.) Cupuliferæ. H. tree. A var. of the Chestnut, having a white pubescence on the underside of the young l. [*C. japonica*, Hort.] Japan.

Castilleja indivisa. (*B. M.* t. 6376.) Scrophulariaceæ. H. herb. annual or biennial. Stem 6–12 in. high, clothed with oblanceolate undulate sparsely-toothed l.: the upper ones are margined with orange-scarlet, whilst the broad spathulate bracts are of a brilliant orange-scarlet, shading into yellow at the base. Fl. pale greenish-yellow. Texas.

Casuarina sumatrana. (*R. H.* 1889, 467.) Casuarinaceæ. S. shr. 4–5 ft. high, much branched; branches leafless, very slender, triquetrous. Sumatra.

Catalpa bignonioides, vars. **aurea, foliis argenteis variegatis, grandiflora,** and **purpurea.** (*W. G.* 1890, 315.) Bignoniaceæ. H. Garden varieties.

Catalpa cassinoides. (*W. G.* 1890, 316.) H. A form having l. intermediate between those of *C. speciosa* and *C. Bungei*.

Catalpa Kæmpferi. (*B. M.* t. 6611.) H. tree, in the way of *C. syringæfolia*, but with rather smaller l. and fl. L. cordate, often lobed. Fl. panicled. Corolla campanulate, oblique, pale yellow dotted with red. Japan.

Catalpa pumila. (*W. G.* 1890, 317.) No description.

Catalpa syringæfolia, foliis argenteis. (*R. H.* 1887, 64.) H. tree. L. variegated. Garden variety.

Catalpa Thunbergii. (*W. G.* 1890, 318.) No description.

Catalpa umbraculifera. (*B. T. O.* 1888, 330.) H. A handsome shr. or small tree 9–12 ft. high, with a rounded compact head. No further description. Perhaps of garden origin. China.

Catalpa wallichiana. (*W. G.* 1890. 318.) H. It is thought to be a Chinese form of *C. Kæmpferi*, and is of rather low growth. [*C. Kæmpferi nana.*]

Catasetum albo-purpureum. (*L.* xi. t. 502–3.) Orchidaceæ. S. Allied to *C. Bungerothi*.

Catasetum apertum. (*K. B.* 1895. 284.) S. Allied to *C. macroglossum*. Pseudobulbs fusiform, 5 in. long: l. lanceolate, 6 in. long; scape erect, 6 in. long; fl. segments concave, forming a sort of cup, and coloured apple-green spotted with brown.

Catasetum Bungerothi. (L. ii. t. 57: *B. M.* t. 6998.) S. Fl. in a raceme. white, 2½ in. in diam. Sep. and pet. lanceolate, acute, stellately spreading: lip very large, transversely oblong, deeply concave, gibbous behind. Tropical America.

—— Var. **album.** (*L.* iv. 8.) S. A var. with large pure white fl., with a delicate rose-coloured spot on the lip.

—— Var. **aureum.** (*L.* iii. t. 116.) S. A var. with light yellow fl.

Catasetum Bungerothi pottsianum. (*L.* iii. t. 104; *G. C.* 1887, ii. 341.) S. A var. having the pet. spotted with purple, and with a few spots on the centre of the lips.

—— Var. **Randi.** (*Ill. H.* 1890, 117, t. 117.) S. A yellow-flowered form with a spot of deep apricot-yellow in the spur.

Catasetum chloranthum. (*J. O.* 1894, 251.) S. This species has the general aspect of *C. macrocarpum* and fl. of about the same size or slightly larger. The sep. are pale green with rosy blotches; the pet. also pale green but with more definite rosy blotches.

Catasetum christyanum. (*G. C.* 1882, xvii. 588; *W. O. A.* t. 83.) S. Like *C. saccatum*, with large reddish-brown fl.; the lip being greenish yellow washed with red on its disk.

—— Var. **chlorops.** (*G. C.* 1882, xvii. 628.) S. Green sep. and pet., and a smaller dark green fringed lip, with an immense spur.

—— Var. **obscurum.** (*G. C.* 1884 xxii. 649.) S. A var. with the sep and pet. blackish-purple. the side lobes of the lip dark rich purple, the middle lobe brownish olive green, and the wall around the mouth of the apex light ochre, marked with red.

Catasetum collare. (*J. O.* 1895, 154.) S. Sep. bright green: pet. light green; lip very thick and fleshy, white slightly shaded with green towards the edges on the outer surface. Venezuela.

Catasetum costatum. (*G. C.* 1887, i. 72.) S. Sep. and pet. yellowish; lip with erect triangular side lobes, ciliate on the upper border, mid-lobe lower, extending into a low blunt triangle, standing over the long blunt cone, obscurely ribbed, mouth contracted.

Catasetum cristatum stenosepalum. (*Ill. H.* 1887, t. 25.) S. A var. with narrow linear-lanceolate purple-brown sep., and rather shorter dull purple pet. striated with blackish-purple. Lip green, fringed, having a triangular basal-fringed crest.

Catasetum darwinianum. (*G. C.* 1889, v. 394.) S. It produces two racemes, one of male flowers, the other female, both from the same pseudobulb, [*C. fuliginosum*, Rolfe in *G. C.* 1888, iv. 473, not of Lindl.] British Guiana.

Catasetum decipiens. (*L.* iii. t. 144.) S. A distinct-looking plant with stout fusiform pseudobulbs 3-4 in. long, lanceolate acute l., and a lax raceme of fl. about 1½ in. in diam. Sep. and pet. lanceolate, acute, reddish-brown with darker spots. Lip with a hemispherical sac, and a revolute margin, yellow outside, reddish-brown inside. Venezuela.

Catasetum discolor vinosum. (*J. O.* 1894, 240. 252.) S. This differs from the type in having fl. of a vinous red colour. Brazil.

Catasetum ferox. (*G. C.* 1895, xviii. 262.) S. Resembling *C. purum*, Nees; bearing a spike of about 20 fl. of a dirty green colour outside and pea-green inside.

Catasetum fimbriatum Cogniauxi. (*L.* xi. t. 499.) S Sep. white, spotted and suffused with rose-purple; lip broadly ovate-triangular, irregularly and deeply fringed, lower portion pale or greenish yellow spotted with red-brown, upper portion whitish. Paraguay.

—— Var. **fissum.** (*G. C.* 1881, xv. 498.) S. Pet. broader than the sep. with small teeth. Lip with the side lobes very expanded and multifid; front lobe toothed, prolonged into a conical sac, with a small conical callus before its opening. Fl. green, with the sep. and pet. spotted and barred with purple-brown.

—— Var. **platypterum.** (*G. C.* 1889, v. 168.) S. A large-flowered var.; colour of segments greenish-white with purple-brown streaks and dots; lip garlic green.

—— Var. **viridulum.** (*G. C.* 1887, ii. 272.) S. A var. with green fl. spotted with reddish-purple, and having a depressed crest on the lip.

Catasetum finetianum. (*J. O.* 1894, 362.) S. Fl. in lax spikes; the long narrow whitish sep. and pet. are suffused and spotted with purple; the oblong lip nearly acute at the tip, margins entire, strongly incurved. Colombia.

Catasetum galeritum. (*L.* ii. t. 67; *G. C.* 1886, xxvi. 616.) S. Allied to *C. atratum*, with a several-flowered lax raceme of rather large fl. Sep. and pet. oblong, acute, pale green, spotted with brown. Lip saccate, oblong, conical at the apex, mostly pale green, ochreous in front, marked with brown around the mouth, and on the yellow ground inside. Colombia?

Catasetum galeritum pachyglossum. (*G. C.* 1889, v. 73.) S. Distinguished from the type by its almost square thick obtuse-angled labellum.

Catasetum garnettianum. (*G. C.* 1888, iv. 692; *B. M.* t. 7069.) S. Allied to *C. barbatum*, but smaller. Pseudobulbs 1–2 in. long, compressed-ovate or conical. L. lanceolate, 4 in. long, ½-¾ in. broad. Scape erect, as long as the l., several-flowered. Fl. about 1¾ in. in diam. Sep. and pet. lanceolate-linear, 10 in. long, acute, light green, thickly spotted with chocolate-brown. Lip white, ¾ in. long, linear, divided into bristles at the apex, and with shorter bristles on the margins below the middle. Brazil.

Catasetum glaucoglossum. (*G. C.* 1885, xxiv. 552.) S. Fl. large, in a stout several-flowered deflexed raceme. Sep. ligulate, acute, brown. Pet. much larger, oblong, acute, glaucous with brown spots. Lip with a depressed rounded sac and a triangular mouth, quite glaucous, with brown spots inside. Mexico.

Catasetum hymenophorum. (*J. O.* 1895, 215; *L.* xi. 14.) S. Nearly allied to *C. chloranthum*, but differing in the general form and colour of the fl. The sep. are a little more fleshy; the lip forms a pouch relatively wider and less deep. South America.

Catasetum imperiale. (*G. C.* 1895, xvii. 10, f. 44; *O. R.* 1895. 18; *L.* x. t. 460.) S. Sep. white, ¾ in. wide; pet. 2 in. long and 1¼ in. wide, white, spotted with crimson-purple. The lip over 2 in. across, rich crimson-purple. [A var. of the hybrid *C. splendens.*]

Catasetum imschootianum. (*J. O.* 1893, 266; *L.* ix. t. 403.) S. Allied to *C. Hookeri*. It has oblong fusiform pseudobulbs, large plicate l., and an erect raceme of numerous yellow fl., the sep. and pet. being tinged with green; the labellum is saccate, fleshy, nearly truncate, and folded inwards. Brazil.

Catasetum Lehmanni. (*Gfl.* t. 1223, f. a–g.) S. Pseudobulbs fusiform, 6 in. long. L. narrow-lanceolate, 16–18 in. long. Peduncle long, few-flowered,

Fl. about 1 in. in diam. Sep. connivent in a globose form, green; lip deeply saccate, subhemispherical, with the apex projecting in an obtuse point, dull orange-yellow. Colombia.

Catasetum Lemosii. (*K. B.* 1894, 393; *B. M.* t. 7444.) S. Allied to *C. albovirens*. Pseudobulbs fusiform, 6 in. long; l. 8 in. by 2¼ in.; scape 1 ft. long, erect, many-flowered; fl. 1½ in. across, brownish yellow, the lip light green and yellow. Brazil.

Catasetum Liechtensteinii. (*G. C.* 1892, xi. 171.) S. Allied to *C. Trulla*, with a raceme of 20 green and brown fl., each 2 in. across.

Catasetum macrocarpum bellum. (*G. C.* 1886, xxv. 74.) S. A var. with brown-purple pet. and a large purple-brown blotch on each side the lip. Brazil.

—— Var. **Lindeni.** (*L.* x. t. 442; *G. C.* 1894, xvi. 306.) S. A var. of *C. splendens*.

—— Var. **luteo-roseum.** (*L.* xi. t. 502–3.) S. Fl. pale green spotted with rose, except the lip which is orange.

—— Var. **carnosissimum.** (*L.* xi. 26.) S. Possibly a monstrosity intermediate between the male and the female condition of this species.

Catasetum macroglossum. (*G. C.* 1877, viii. 552.) S. Allied to *C. serratum* and *C. planiceps*, but distinguished by its larger fl., with a large semicircular internal callus to the lip. Fl. variable in colour, ochre with green sep. and pet., light and dark green, light and dark yellow, and brownish-purple. Ecuador.

Catasetum maculatum luteo-purpureum. (*J. O.* 1895, 12.) S. A colour-var., the characters of which are indicated by the name.

Catasetum medium. (*G. C.* 1885, xxiv. 6.) S. Peduncle dark red, bearing numerous small greenish-yellow fl., marked on the sep. and pet. with transverse brown bars, and with red side lobes to the lip.

Catasetum mirabile. (*J. O.* 1895, 366; *L.* x. t. 456.) S. A natural hybrid resembling *C. Luciani*.

Catasetum pallidum. (*J. O.* 1894, 252.) S. Near *C. finetianum*, from which it differs principally in its shorter sep. and pet. and more fleshy lip.

Catasetum Phasma. (*G. C.* 1877, viii. 488.) S. Allied to *C. Gnomus*; well marked by the erect limb of the side lobes of the serrated lip. Fl. rather large and numerous, racemose; sep. and pet. dark green, with numerous purplish-brown spots; lip white; column light green spotted with brown. Brazil.

Catasetum pileatum. (*G. C.* 1882, xvii. 492.) S. An interesting form, with narrow light red sep., broad long acute white pet, and a white lip, which is described as a wide nearly obtuse-angled expansion descending in a blunt cone. Venezuela.

Catasetum pulchrum. (*G. C.* 1888, iii. 10, 235; *L.* iii. t. 120; *O.* 1888, 260.) S. Pseudobulbs fusiform, 4–6 in. long, ¾–1 in. thick, from the base of which spring short racemes of 5 or 6 fl. Sep. and pet. elliptic, acute, light green with chocolate bars. Lip oblong-saccate, obscurely 3-toothed at the apex, deep yellow. Brazil.

Catasetum punctatum. (*K. B.* 1894, 364; *L.* xi. t. 496.) S. Allied to *C. albovirens*. Pseudobulbs fusiform, 6 in. long; l. broad-lanceolate 10 in. long; scape 8 in. long, bearing about 12 aromatic fl., which are 2 in. across; the sep. and pet. yellow green, with brown spots; the lip dark yellow. Brazil.

Catasetum Quornus. (*H. G.* 1888, 285.) A misprint for *C. Gnomus*.

Catasetum Randii. (*K. B.* 1894, 394; *B. M.* t. 7470.) S. Allied to *C. garnettianum*, which it resembles in habit, differing only in the lip, which has a short broad brush-like appendage. Brazil.

Catasetum revolutum. (*J. O.* 1894, 303.) S. The fl. in this are of the same texture as those of *C. splendens*; the sep. and pet. are a slightly greenish pale yellow, the lip forming a less deep and much narrower pouch than in *C. splendens*.

Catasetum rodigasianum. (*L.* vi. t. 259.) S. Fl. large in a long raceme. The sep. are green spotted with brown

on the outside, and almost entirely brown inside; the pet. are green spotted with brown; and the concave lip is three toothed in front, and of a yellow colour spotted with purple-brown. Santa Catharina, Brazil.

Catasetum rodigasianum tenebrosum. (*L.* viii. t. 406.) S. A var. with much darker coloured fl. than the type. Brazil.

Catasetum sanguineum integrale. (*G. C.* 1887, ii. 214.) S. A trifling var. with an entire lip.

Catasetum semiroseum. (*W. G.* 1896, 424, t. 4.) S. Pet. and sep. whitish or bright red; lip greenish white, carmine-coloured at the base. One of the numerous vars. of the natural hybrid *C. splendens*.

Catasetum splendens. (*O. R.* 1894, 356; *J. O.* 1894, 302.) S. A supposed natural hybrid, between *C. Bungerothii* and *C. macrocarpum*. Venezuela.

—— Var. **acutipetalum.** (*L.* xi. t. 502–3.) S. Between *C. splendens* and its variety *C. Lindeni*.

—— Var. **album.** (*L.* x. t. 455.) S. Fl. pure white, tinted with green. Sides of lip finely denticulate.

—— Var. **Aliciæ.** (*L.* x. t. 457.) S. Fl. bright rose, lined with purple, except the lip which is white.

—— Var. **atro-purpureum.** (*L.* x. t. 456.) S. Fl. very dark purple with some yellow on the lip.

—— Var. **aurantiacum.** (*O. R.* 1894, 356.) S. Fl. deep yellow with a few small purple spots on sep. and petals.

—— Var. **aureo-maculatum.** (*Ill. H.* 1896, 91, t. 54.) S. A form with yellow fl. spotted with rich red-brown.

—— Var. **aureum.** (*J. O.* 1894, 302.) S.

—— Var. **flavescens.** (*O. R.* 1894, 356.) S. Like var. *Lindeni* but fl. yellow.

—— Var. **Lindeni.** (*O. R.* 1894, 356.) S. Sep. and pet. of *C. macrocarpum*, but lip somewhat three-lobed with a well-developed callus.

Catasetum splendens Luciani. (*O. R.* 1894, 356.) S. Lip of *C. Bungerothi*, pet. and sep. of *C. macrocarpum*.

—— Var. **maculatum.** (*O. R.* 1894, 356.) S. Sep. and pet. densely spotted with red-purple.

—— Var. **obrienianum.** (*O. R.* 1894, 356.) S. Sep. and pet. of var. *Luciani*; lip ivory-white.

—— Var. **regale.** (*O. R.* 1894, 356.) S. Pet. with purple marking at base; lip marbled and partly suffused inside with reddish purple.

—— Var. **rubrum.** (*L.* xi. t. 502–3.) S.

—— Var. **viride.** (*O. R.* 1894, 356.) S. Fl. slightly flushed with pale green.

—— Var. **worthingtonianum.** (*L.* xi. 14.) S. In shape resembling *C. splendens album*, but in colour the form of this hybrid called *C. imperiale*.

Catasetum stupendum. (*L.* xiii. t. 587.) S. A synonym of *C. incurvum*.

Catasetum tabulare brachyglossum. (*G. C.* 1880, xiv. 456.) S. A curious var. with shorter fl. than the type, having a shorter lip and broader callus more tapering to the top. Colombia.

—— Var. **læve.** (*G. C.* 1881, xvi. 492.) S. A trifling var. with a smooth callus on the lip.

—— Var. **rhinophorum.** (*G. C.* 1880, xiv. 358.) S. The large rough tongue-like callus occupies nearly the whole of the lip. Fl. dull olive-green, the sides of the ciliated lip spotted with brown, its callus whitish with pale brown spots. Colombia.

—— Var. **serrulatum.** (*Gfl.* t. 1223, f. h–m.) S. Dorsal sep. and pet. greenish yellow. Pet. dotted with red: long lateral sep. greenish; lip green, with the very thick central crest white, and the margin finely serrulate. Andes, Colombia.

—— Var. **virens.** (*G. C.* 1880, xiv. 456.) S. Fl. greenish, blotched and washed with light purple-brown. Colombia.

Catasetum tapiriceps. (*G. C.* 1888, iii. 136 ; *H. G.* 1888, 176 ; *L.* iii. 58 ; *O.* 1888, 211.) S. Like *C. macroglossum.* Sep. green. Pet. brown. Lip orange, trigonous-saccate, with a free serrulate margin, the side lobes revolute, and the mid-lobe with a transverse emarginate keel not far from the margin. Brazil.

Catasetum tigrinum. (*G. C.* 1881, xv. 40 ; *L.* i. t. 27.) S. Pet. very broad, with a narrow triangular thick lip with thicker margins, having a single tooth on one side of the base. The sep. and pet. are white, with numerous cinnamon-coloured bars ; column and lip whitish-ochre.

Catasetum triodon. (*G. C.* 1878. x. 461.) S. Bluish-green scape bearing several ascending large yellowish-green fl. ; sep. reflexed : pet. upright ; lip with half-ovate reflexed deeply-fringed side lobes ; middle lobes nearly square or triangular, prolonged into a strong tooth, with a few side teeth and bristles. Brazil.

Catasetum Trulla maculatissimum. (*G. C.* 1888, iii. 168 ; *H. G.* 1888, 178.) S. A var. having the pet. and lip spotted with brown, and the side lobes of the lip fringed.

—— Var. **subimberbe.** (*G. C.* 1887, ii. 552.) S. A var. without a fringe of hairs to the lip.

Catasetum uncatum. (*K. B.* 1895, 283.) S. Allied to *C albovirens.* Pseudobulbs fusiform, 3–8 in. long ; l. lanceolate 12 in. long ; scape erect, bearing numerous green fl. Brazil.

Cattleya Aclandiæ maxima. (*L.* ix. t. 421.) Orchidaceæ. S. A var. with larger fl. and deeper colours than the type.

—— Var. **salmonea.** (*L.* ix. t. 399.) S. A var. with the ground colour of the fl. salmon-red.

Cattleya Alexandræ. (*G. C.* 1892, xi. 523 ; xii. 672 ; *R. H. B.* 1892, 196, f. 19 ; *J. O.* iii. 168, f. 3.) S. Similar in general characters to *C. Leopoldii*, but with dull brown fl., the lip uniformly rosy-purple. [*C. elongata*, Rodrig.] Brazil.

—— Var. **elegans.** (*L.* viii. t. 358.) S. A var. with larger fl. than the type, coloured rose-purple.

Cattleya Alexandræ tenebrosa. (*L.* viii. t. 357.) S. A var. with fl. of a deep dusky brown colour and a rose-purple lip.

Cattleya Aliciæ. (*L.* xi. t. 494.) G. Sep. and pet. white ; lip deep rose. Possibly a natural hybrid.

Cattleya Amesiæ. (*G. C.* 1892, xi. 816.) G. A garden hybrid.

Cattleya amethystoglossa rosea. (*L.* viii. t. 375.) G. A rose-tinted var. of *C. guttata Prinzii.*

Cattleya amœna. (*O.* 1891, 273, t.) G. A garden hybrid between *C. Loddigesii* and *Lælia Perrinii.*

Cattleya armainvillierensis. (*R. H.* 1895, 359.) G. A garden hybrid between *C. Mendelii* and *C. Gigas.*

Cattleya arthuriana. (*G. C.* 1894, xv. 102.) G. A garden hybrid between *C. dormaniana* and *C. luteola.*

Cattleya ashtoniana. (*G. C.* 1893, xiv. 406.) G. A garden hybrid between *C. Harrisoniæ* and *C. Gigas.*

Cattleya aurea marmorata. (*G. C.* 1888, iv. 326.) S. A var. with the yellow sep. and pet. marbled with dark rose. Lip crimson in front, yellow, veined with purple on the basal half. Colombia.

—— Var. **statteriana.** (*G. C.* 1892, xii. 379.) S. A form of *C. labiata dowiana*, with less of the crimson colour on the lip than usual. [Syn. *C. statteriana. J. of H.* 1892, xxv. 277, f. 38.]

Cattleya ballantiniana. (*R.* ii. t. 91.) G. A hybrid raised from *C. Trianæ* and *C. Warscewiczii.*

Cattleya Batalinii. (*G. C* 1892, xii. 75, 332.) S. Recalling *C. schilleriana.* Fl. 2½ in. across, purplish rose ; side lobes of lip whitish ; mid-lobe deep purple ; column very large. Brazil.

Cattleya bicolor cærulea. (*G. C.* 1894, xvi. 378.) G. A var. with greenish sep. and pet. and blue labellum.

—— Var. **Lewisii.** (*G. C.* 1896, xx. 310.) G. A var. with emerald green sep. and pet. and white lip stained with deep purple.

Cattleya bicolor measuresiana. (*W. O. A.* t. 357.) G. A handsome var., having the lip bordered with white. Brazil.

—— Var. **wrigleyana.** (*G. C.* 1884, xxii. 206.) G. A variety with grey-green sep. and pet. and dark purple lip.

Cattleya bleesensis. (*R. H.* 1892, 116.) G. A garden hybrid between *C. pumila* and *C. Loddigesii*.

Cattleya bowringiana. (*Veitch Cat.* 1886, 3, f.) G. Allied to *C. Skinneri*. It bears a corymbose raceme of 5 to 10 fl. about 2½ in. in diam., of a rich rosy purple, with a transverse maroon band, behind which the tube is whitish. Central America.

—— Var. **Ashworthii.** (*O. R.* 1895, 16.) G. Fl. of a nearly uniform light rose-purple.

Cattleya Browniæ. (*G. C.* 1894, xvi. 447 : *O. R.* 1894, 334.) G. A garden hybrid between *C. bowringiana* and *C. harrisoniana*.

Cattleya Brownii. (*G. and F.* 1893, 515.) G. Pseudobulbs 2 ft. high, each bearing a pair of large oblong coriaceous l. and a raceme of five or more fl. each 4 in. in diameter : the sep. and pet. are bright rose-purple and undulated ; the lip is three-lobed and pale purple with veins of a darker shade.

Cattleya brymeriana. (*G. C.* 1883, xx. 492 ; *W. O. A.* t. 184.) G. Sep. and pet. rosy-purple. Lip very broad, the front lobe projecting, obcordate ; margins rich mauve, middle area orange.

Cattleya Bullieri. (*R. H.* 1886, 444, t.) G. This is a trifling form of *C. labiata Trianæ*.

Cattleya burberryana (*G. C.* 1892, xi. 535.) S. A garden hybrid between *C. imbricata* and *C. superba*.

Cattleya calummata. (*R. H.* 1883, 564, t. ; *Fl. and P.* 1884, 28 ; *G. C.* 1886, xxvi. 525, f. 104.) S. A garden hybrid between *C. amethystina* and *C. Acklandiæ*.

Cattleya chamberlainiana. (*G. C.* 1881, xvi. 427.) S. Garden hybrid between *C. guttata Leopoldi* and *C. dowiana*.

Cattleya citrina aurantiaca. (*O. R.* 1894, 194.) G. Differs from the type in its larger and richer coloured and more elongated lip.

Cattleya citrino-intermedia. (*G. C.* 1888, iii. 73 ; *H. G.* 1888, 128 ; *O.* 1888, iii. 34.) G. Garden hybrid.

Cattleya crispa buchananiana. (*W. O. A.* t. 81. G. A free-flowering form, with large fl. ; the sep. and pet. of a delicate pink ; the lip yellow in the throat, with crimson veins, the frill of the side lobes white, with two purple spots, the front lobe rich purple. Brazil. [*Lælia crispa*, Reichb. f.]

—— Var. **delicatissima.** (*W. O. A.* t. 424.) G. A var. with white fl., the lip veined with mauve. South Brazil.

Cattleya crocata. (*G. C.* 1886, xxvi. 360.) G. Something in the way of *C. Eldorado*, with large white fl., having a four-lobed lip with a deep orange mid-line, expanding on the disk into a large blotch, with teeth in front.

Cattleya dormanniana. (*G. C.* 1882, xvii. 216.) G. Garden hybrid.

Cattleya dowiana aurea. (*Ill. H.* 1883, t. 493 ; *W. O. A.* t. 84.) S. Fl. very large, pale yellow : the deep purple lip beautifully veined with yellow. [Syn. *C. aurea*, Lindl.] Colombia.

—— Var. **chrysotoxa.** (*R.* ii. 71, t. 80.) S. Sep. and pet. bright yellow, the lip having on each side of the disk a large golden blotch veined with dark crimson. Colombia.

Cattleya dukeana. (*G. C.* 1887, i. 576.) G. Pseudobulbs about 2 ft. high. L. 5 in. long, 2½ in. broad, purplish-green. Sep. shining, light ochre outside ; the upper one washed with dull mauve-purple inside, with a green apex ; the lateral ones bent at an angle, mauve-purple on basal part, brownish on apical part. Pet. broader, wavy, mauve-purple on the disk, lighter on the borders. Lip with the side lobes not quite covering the column, white with light purple margins ; front lobe broadly stalked, reniform, toothed, and covered with warts, mauve-purple with a narrow white border ; the disk between the side lobes sulphur-yellow with six mauve keels.

Cattleya Eldorado Lindeni. (*L.* ix. t. 409.) G. A var. with rosy-purple fl. and a richly coloured lip.

—— Var. **ornata.** (*G. C.* 1883, xx. 526.) G. A fine var. with dark purple tips to the pet.

—— Var. **Oweni.** (*L.* ix. t. 409.) G. A var. with white sep. and pet.; the lip also white with a yellow blotch and a band of rose-crimson.

—— Var. **Treyeranæ.** (*L.* ix. t. 402.) G. A var. with large broad lilac sep. and pet. and a large labellum with a blotch of orange-yellow on the front lobe.

—— Var. **virginalis.** (*W. O. A.* t. 388.) G. [*C. virginalis*, Linden et André, and *C. Wallisii*, Linden].

Cattleya felix. (*G. C.* 1876, vi. 68.) S. Garden hybrid between *Lælia crispa* and *Cattleya schilleriana.*

Cattleya flaveola. (*G. C.* 1888, iv. 473; *H. G.* 1888, 551.) Garden hybrid.

Cattleya floribunda. (*G. and F.* 1895, 224.) G. Possibly a natural hybrid between *C. maxima* and *C. labiata*, with long scapes bearing twenty fl., which are carmine, white or variously coloured.

Cattleya Fowleri. (*G. C.* 1895, xviii. 178, 192, f. 47.) G. A garden hybrid between *C. hardyana* and *C. Leopoldi.*

Cattleya gaskelliana alba. (*G. C.* 1888, iv. 178; *W. O. A.* t. 353.) G. A white-flowered var. with a yellow throat to the lip. Venezuela.

—— Var. **albens.** (*Gfl.* 1888, 297, 545, t. 1274; *G. C.* 1888, iv. 122.) G. A var. with white fl. delicately tinted with lilac, and with a yellow disk to the lip, which is veined in the throat with orange-brown.

—— Var. **delicata.** (*O. R.* 1895, 270.) G. Fl. white, faintly tinted with lilac; lip deep yellow and purple.

—— Var. **picta.** (*G. C.* 1890, viii. 352; *H. G.* 1890, 504.) G. Distinct in having variegated sep. and pet.

—— Var. **speciosa.** (*G. M.* 1891, 495.) G. A white var. with crisp margins and a rich rose-purple blotch on the labellum.

Cattleya Gibeziæ. (*L.* iii. t. 133.) See *C. intermedia Gibeziæ.*

Cattleya Gigas albo-striata. (*Fl. and P.* 1882. 121.) G. A distinct form, with pink sep. and pet. having a central white bar.

—— Var. **amplissima.** (*L.* x. t. 461.) G. A large-flowered highly coloured variety.

—— Var. **burfordiensis.** (*Fl. and P.* 1882, 106.) G. A fine form, with large rosy-purple fl., with a lip of intense amethyst.

—— Var. **franconvillensis.** (*O. A.* t 525.) G. A var. with pure white sep. and pet. and a crimson and yellow lip.

—— Var. **grandiflora.** (*Fl. and P.* 1882, 121.) G. A form, with very large rose-pink fl., having the upper part of the richly coloured lip white, edged with magenta.

Cattleya granulosa asperata. (*G. C.* 1886, xxvi. 681.) G. A fine var. with sep. and pet. brownish, spotted with dark purple. Lip yellowish at base, light vivid purple with a broad white border in front, rough on the surface.

—— Var. **Banneri.** (*O. R.* 1896. 244.) G. A var. with the sep. and pet. suffused with bright lurid purple. Fl. 6 in. across.

—— Var. **buyssoniana.** (*G. C.* 1890, viii. 588, f. 116; *H. G.* 1890, 556.) G. Distinct from the type in having ivory-white sep. and pet.

Cattleya guatemalensis wischhuseniana. (*G. C.* 1888, iv. 378.) G. A var. with light reddish-purple sep., rose-purple pet. Lip brown with the disc yellow, and a white spot at the base. Panama.

Cattleya guttata immaculata. (*G. C.* 1886, xxvi. 326.) G. A fine var., with the sep. and pet. of a mauve-brown colour without spots. The lip is white with the front lobe purple.

—— Var. **leopardina.** (*L.* i. t. 19.) G. A var. with elongate pseudobulbs, and large racemes. the sep. and pet. are thickly spotted with dark brown, the side lobes of the lip are white, and the broad bilobed front lobe is rich purple-red.

Cattleya guttata lilacina. (*G. C.* 1881, xvi. 38.) G. A var. with the ground colour of the sep. and pet. light lilac; lip whitish with a lilac hue, the middle lobe purple.

—— Var. **munda.** (*G. C.* 1888, iv. 378.) G. Sep. unspotted, greenish changing to yellow.

—— Var. **odoratissima.** (*G. C.* 1888, iv. 378.) G. A var. with Heliotrope-scented fl. Sep. and pet. yellow on both sides. Lip with purple front lobe and disk, and white side lobes.

—— Var. **pernambucensis.** (*Ill. H.* 1893, t. 184.) G. Sep. and pet. greenish yellow faintly spotted with red-brown; lip bright red, bordered with white.

—— Var. **phœnicoptera.** (*G. C.* 1883, xix. 688.) G. A var. with deep purple sep. and pet. and a whitish lip.

—— Var. **punctulata.** (*G. C.* 1880, xiv. 358.) G. Fl. light sulphur-coloured, with a very few small purple spots on the sep. and pet. Brazil.

—— Var. **williamsiana.** (*G. C.* 1884, xxii. 70.) G. A var. without spots on the purplish sep. and pet.; lip white, with a dark purple front lobe.

Cattleya hardyana. (*G. C.* 1885, xxiv. 206; *W. O. A.* t. 231.) G. Fl. measuring 6-8 in. across. Sep. and pet. of a rich mauve; the sep. lanceolate; the pet. elliptic and wavy. Lip very large, deeply bilobed and frilled, deep crimson, beautifully veined on the disk with yellow and with a large yellow spot on each side. Colombia.

—— Var. **gardeniana.** (*L.* viii. t. 353) S. A fine form with rose-coloured sep. and pet.; lip yellow, with the apical part deep magenta. Garden origin.

—— Var. **laversinensis.** (*L.* vii. 37.) S. Sep. marbled with purple on a lighter ground; the pet. dark rose-purple; lip richly coloured.

—— Var. **Lindeni.** (*G. C.* 1895, xviii. 36; *L.* x. t. 468.) S. A var. with deep lilac segments, with blotches of golden yellow in the throat, and with a rich carmine-coloured slightly frilled anterior lobe.

Cattleya hardyana luciana. (*L.* x. t. 449.) S. A var. with large fl. which might properly be called a form of *C. Warscewiczii* (*C. Gigas*).

Cattleya Harrisii. (*G. C.* 1887, i. 104; *Veitch Man. Cattl.* 91.) G. Garden hybrid.

Cattleya harrisoniana regnieriana. (*G. C.* 1888, iv. 264.) G. Sep. and pet. rather short, of a clear warm purple. Lip with the side lobes light purple outside, inside light yellow with a light purple border; front lobe erect, very deeply plaited and minutely crenulate, whitish yellow inside with an orange callus at the base, purplish-tinted outside.

Cattleya hybrida. (*F. M.* t. 473.) G. Garden hybrid.

Cattleya intermedia candida splendida. (*Gfl.* 1890, 1, t. 1313.) G. Fl. pure white except the front lobe of the lip, which is carmine-purple. Rio Janiero.

—— Var. **Gibeziæ.** (*L.* iii. t. 133.) G. A var. with white fl., marked with 3-orange lines on the disk of the lip. Brazil.

Cattleya intermedia parthenia. (*G. C.* 1888, iv. 178.) G. A form with elongated pseudobulbs and white flowers.

—— Var. **picturata.** (*O. R.* i. 198.) G. A var. with splashes of rose on the sep. and pet., and the side lobes as well as the front lobe of the lip heavily flaked and striped with purple.

—— Var. **punctatissima.** (*R.* 2nd ser. i. 51, t. 24; *Gfl.* 1891, 495.) G. A pretty form with pale rose sep. and pet. dotted with purple, and a dark purple front lobe to the lip. South Brazil.

Cattleya intermedio-flava. (*R. H.* 1896, 549.) G. A garden hybrid between *Cattleya intermedia* and *Laelia flava*.

Cattleya intermedio-Loddigesii. (*G. C.* 1896, xix. 593.) G. A supposed natural hybrid between the two species indicated in the name.

Cattleya intricata. (*G. C.* 1884, xxii. 7.) G. Resembling *C. intermedia*, with rose-coloured sep. and pet., and a warm-purple lip, with long, whitish side lobes. [Supposed to be a natural hybrid between *C. intermedia*, Graham and *C. guttata*, Lindl.]

—— Var. **maculata.** (*G. C.* 1890, vii. 763.) G. This var. has fl. coloured delicate rose with purplish spots. Brazil.

Cattleya johnstoniana. (*G. C.* 1893, xiv. 406.) G. A garden hybrid of the same origin as *C. ashtoniana*.

Cattleya kienastiana. (*G. C.* 1894, xvi. 257.) G. A garden hybrid between *C. aurea* and *C. labiata*, var. *luddemanniana*.

Cattleya kimballiana. (*L.* ii. 89; *G. C.* 1887, ii. 108.) G. A fine species with large fl.; the lanceolate acute sep., and very broad elliptic wavy pet. of a delicate rosy white; the tube of the lip white outside with some yellow near the front margins, yellow inside with orange lines: the wavy front lobe rich purple on the front part. Venezuela.

Cattleya krameriana. (*G. C.* 1888, iv. 323.) G. Said to be a hybrid between *C. intermedia* and *C. Forbesii*, raised in Brazil.

Cattleya labiata autumnalis. (*L.* iii. t. 112.) G. An autumn-flowering form with bright rose-purple fl., having a white blotch on each side of the mouth of the tubular lip, and a large wedge-shaped dark purple blotch on the front part.

—— Var. **bella.** (*G. C.* 1882, xvii. 700.) G. Var. with lilac pet. and a darker mauve-lilac front part to the lip.

—— Var. **crocata.** (*G. C.* 1885, xxiii. 520.) G. This has a broad pure white fl., with a broad, deep orange line running from the base of the lip on the anterior disc, where it expands into a pentagonal blotch, with teeth in front.

—— Var. **Ernesti.** (*R.* i. 99, t. 43.) G. A var. with the sep. and pet. of a delicate pink, with the apex of the pet. blotched with purple. Lip purple with a darker purple disk, and the tube white with a large yellow blotch in front.

Cattleya labiata foleyana. (*G. C.* 1894, xvi. 447; *W. O. A.* t. 497.) G. A large-flowered var. with white sep. and pet. and blotches of orange and crimson on the lip.

—— Var. **leucophæa.** (*W. G.* 1888, 109.) G. A showy var. with delicate rose sep. and pet.; lip lilac-shaded, striped with yellow in the throat, crisped on the margin.

—— Var. **magnifica.** (*Gfl.* 1888, 497, t. 1281, f. 1.) G. Fl. light rosy-purple, the front lobe of the lip dark purple, and the throat yellow.

—— Var. **marmorata.** (*G. C.* 1892, xi. 816.) G. Fl. mottled. A var. of the plant known in gardens as *C. Warneri*.

—— Var. **massangeana.** (*G. C.* 1883, xix. 242.) G. A var. with white sep. streaked with mauve; pet. mauve down the middle, with white spots, and oblique mauve lines extending towards the border; lip with white middle line, bordered with purple, which radiates in lines outwards: tip of lip dark purple with a white border.

—— Var. **nalderiana.** (*G. C.* 1885, xxiii. 756. G. A var. with fl. of a peculiar greyish rose-purple, with darker purple lines and markings.

—— Var. **Peetersii.** (*O. R.* 1894, 78.) G. A var. with dark rose-purple fl., irregularly variegated with a lighter shade.

—— Var. **percivaliana.** (*G. C.* 1882, xvii. 796; *W. O. A.* t. 144.) G. Front part of the lip deep purple, with a small pale triangle on each side, and the rest with radiating brown stripes.

—— Var. **percivaliana bella.** (*G. C.* 1888, iii. 361.) G. A var. with bright purple fl. having the wavy sep., the pet., and front part of the lip, all spotted with dark purple.

—— Var. **Regina.** (*G. C.* 1884, xxi. 372.) G. A showy form, with rich purple flowers.

—— Var. **rochellensis.** (*G. C.* 1888, iv. 533.) G. A white var. with a yellowish hue on the disk, and faint purple on the front part of the lip. [*C. rochellensis.*]

Cattleya labiata Sanderæ. (*G. C.* 1892, xii. 567; *Gard.* xlii. 417.) G. A large-flowered variety with pink segments and a deep crimson labellum, margined with white.

—— Var. **sanderiana.** (*G. C.* 1882, xviii. 8.) G. A form with very large richly coloured flowers.

—— Var. **schrœderiana.** (*G. C.* 1886, xxv. 554; 1896, xx. 73, f.) G. A fine var. with large white fl., the lip being marked with broken mauve lines and having an orange median line.

—— Var. **warocqueana.** (*G. C.* 1890, vii. 735; *O.* 1890, 161.) G. Garden form. [Syn. *C. warocqueana*, Lind.]

—— Var. **wilsoniana.** (*G. C.* 1887, ii. 460.) G. A var. with amethyst coloured sep., pet., and front lobe of lip, which latter is marked and spotted with dark purple, and has on each side a dark purple area; at the base are some delicate lines on a pale ground, and in the centre are some oblique dark purple lines and a light yellow eye on each side.

Cattleya lauremossiæ. (*G. C.* 1896, xix. 468.) G. A garden hybrid between *C. lawrenciana* and *C. Mossiæ*.

Cattleya lawrenciana. (*G. C.* 1885, xxiii. 338, 374, 375, ff. 68, 69.) S. A species with large purple-lilac fl., marked on the front part of the lip with warm dark colour. British Guiana.

—— Var. **atrorubens.** (*G. C.* 1895, xvii. 662.) S. A brilliantly coloured form.

—— Var. **concolor.** (*G. C.* 1886, xxv. 585.) S. Whole fl. of a light purple colour.

—— Var. **oculata.** (*Veitch. Man. Cattl. and Lælia*, 41.) S. Central area of the lip buff-yellow, and without a purple band.

—— Var. **rosea-superba.** (*Veitch. Man. Cattl. and Lælia*, 41.) S. A robust var. with large delicate purple fl., striated with white; the sep. paler than the pet. and lip, which has a white disk.

Cattleya lawrenciana Vinckei. (*G. C.* 1895, xvii. 468.) S. A var. with lavender-coloured sep. and pet. and dull purple or slate-blue lip.

Cattleya leucoglossa. (*G. C.* 1892, xii. 566; *J. of H.* 1892, xxv. 413, 56.) G. A garden hybrid between *C. fausta* and *C. Loddigesii*.

Cattleya Lindeni. (*J. of H.* 1890, xxi. 471, 64.) S. Probably a var. of *C. Gigas*. The sep. and pet. are rose-coloured, with white veins, and the lip magenta-crimson, bright yellow, with undulated margin.

Cattleya lowryana. (*G. and F.* 1891, 293.) G. A supposed garden hybrid between *C. intermedia* and *C. Forbesii*.

Cattleya lucieniana. (*G. C.* 1885, xxiv. 456; *Gfl.* 1886, 156.) G. L. and pseudobulbs of *C. harrisoniana*, and a fl. like that of *C. Isabellæ*, but darker and richer. Sep. and pet. brown with a wash of purple. Lip trifid, rich purple, with pale yellow side lobes, and red veins and keels.

Cattleya luddemanniana Ernstii. (*G. C.* 1896, xix. 655.) G. Fl. larger and richer in colour than those of the type.

Cattleya luteola Roezlii. (*G. C.* 1881, xv. 782.) G. A var. with brighter colour than the type, with two large purple spots on each side, the middle of the lip interrupted by white veins. Peru.

Cattleya Manglesii. (*G. C.* 1880, xiv. 556.) G. A garden hybrid between *C. speciosissima* and *C. Loddigesi*.

Cattleya Mantinii. (*O. R.* 1894, 365; *Gard.* 1894, xlvi. 458.) S. A garden hybrid between *C. bowringiana* and *C. dowiana aurea*.

Cattleya Mardellii. (*G. C.* 1879, xi. 234; *F. M.* t. 437; *W. O. A.* t. 287.) G. Garden hybrid.

Cattleya Marstersoniæ. (*G. C.* 1878, x. 556; *W. O. A.* t. 385.) S. A hybrid of *C. labiata*.

Cattleya massaiana. (*W. O. A.* t. 362.) S. Large fl. like those of *C. dowiana*, having mauve sep. and pet., and a rich magenta lip. with a large yellow blotch on each side the throat, which is veined with yellow. Antioquia. Colombia.

Cattleya Mathoniæ. (*L.* xii. t. 539.) G. A supposed natural hybrid between *C. Mossiæ* and *C. luddemanniana.*

Cattleya maxima alba. (*Veitch Man. Cattl. and Lælia*, 44.) G. A form with white fl., having the usual yellow and purple markings on the lip.

—— Var. **aphlebia.** (*G. C.* 1884, xxii. 394.) G. The purple reticulate veins are absent from the lip, which has a yellow disk surrounded by light purple.

—— Var. **doctoris.** (*G. C.* 1883, xix. 624.) G. A name now given to the pale rose-coloured var. of this plant.

—— Var. **floribunda.** (*L.* xii. t. 506.) G. Form with bright rose-coloured fl., lip crimson purple with crisp edges margined with white.

—— Var. **gigantea.** (*G. C.* 1895, xvii. 82.) G. A light coloured variety.

—— Var. **hrubyana.** (*L.* i. t. 12.) G. Fl. pale rose-tinted, the lip being handsomely veined with red and marked with a central yellow stripe.

—— Var. **malouana.** (*L.* v. t. 211.) G. A form with short pseudobulbs and dark coloured flowers.

—— Var. **marchetiana.** (*W. O. A.* t. 404.) G. A var. with dark coloured fl., the dark rosy purple ground colour being heavily blotched and veined with dark magenta-purple, the throat and mid-line of the lip being clear yellow. Ecuador; Peru.

Cattleya Measuresii. (*G. C.* 1886, xxvi. 526; *Veitch Man. Cattl.* 86.) G. Garden hybrid.

Cattleya Mendelii balliana. (*Sand. Cat.* 1896, 5.) G. Remarkable for the large size and rich colour of the flowers.

—— Var. **bella.** (*W. O. A.* t. 225.) This is the same as *C. labiata bella.*

—— Var. **grandis.** (*G. C.* 1895, xvii. 662.) G. A form with white fl., and rose and yellow markings on the lip.

Cattleya Mendelii jamesiana. (*Fl. and P.* 1882, 75.) G. Fl. large; sep. and pet. rosy, with purple tips; lip crisped, velvety purple-rose in front, having the disk yellow, and the throat whitish with crimson pencillings.

—— Var. **Sanderæ.** (*G. C.* 1895, xvii. 662.) G. A richly coloured form.

Cattleya Mitchelli. (*G. C.* 1876, vi. 386; *F. M.* t. 337.) G. A garden hybrid between *C. quadricolor* and *C. guttata Leopoldi.*

Cattleya Mossiæ amœna. (*L.* x. t. 470.) G. This is a pale delicately-coloured variety.

—— Var. **amplissima.** (*L.* xi. tt. 482-3.) G. Lip red covered with reticulations of a darker shade, and having a yellow patch on each side of the throat.

—— Var. **ardens.** (*L.* xi. tt. 482-3.) G. Lip orange bordered with white and lined and spotted with red, especially in front.

—— Var. **arnoldiana.** (*G. C.* 1884, xxii. 7.) G. A var. with rose-coloured sep. and pet., and a rather narrow lip.

—— Var. **aurea grandiflora.** (*G. C.* 1887, ii. 219.) G. Garden variety.

—— Var. **Aurora.** (*L.* xi. tt. 482-3.) G. Lip with a red patch in front, which is prolonged into the yellow throat.

—— Var. **bousiesiana.** (*L.* iv. t. 185.) G. Fl. marbled with rosy-purple.

—— Var. **decora.** (*W. O. A.* t. 421.) G. A form with the throat and sides of the lip yellow, veined with magenta-purple. La Guayra, Venezuela.

—— Var. **eximia.** (*L.* xi. tt. 482–3.) G. Lip bearing a red patch in front, and orange in the centre and throat.

—— Var. **hardyana.** (*W. O. A.* t. 125.) G. Sep. and pet. irregularly blotched with magenta on a pale purple ground, and the lip irregularly marked with darker magenta on a yellow and white ground. La Guayra, Venezuela.

Cattleya Mossiæ Imperator. (*L.* xi. tt. 482–3.) G. Lip red, bordered with white, and passing gradually into orange at the throat.

—— Var. **magenta.** (*L.* xi. tt. 482–3.) G. Closely resembles var. *eximia* in colour, but has a larger red patch.

—— Var. **Mendeli.** (*L.* viii. t. 376.) G. A var. intermediate between *C. labiata Mossiæ* and *C. labiata Mendelii*.

—— Var. **Treyeranæ.** (*L.* x. t. 438.) G. A var. with fl. of medium size and rich colours, the lip being especially gaudy.

—— Var. **variabilis.** (*Jard.* 1888, 114. f.) G. An interesting form, in which the fl. are blue when they first open, afterwards changing to mauve, and then to rose.

—— Var. **wambekeana.** (*L.* x. t. 433.) G. A var. with very large, richly-coloured flowers.

—— Var. **warocqueana.** (*L.* iv. t. 192.) G. Fl. large, white, delicately tinted with rose; the lip with a rich orange-coloured throat, streaked with magenta in front.

Cattleya Nilsoni. (*Gfl.* 1889, 481.) G. Pseudobulbs and l. similar to those of *C. guttata* and *C. velutina*. Fl. like that of *Lælia elegans*. Brazil.

Cattleya nobilior. (*G. C.* 1883, xix. 728, 729, f. 120; *Ill. H.* 1883, t. 485; *Fl. and P.* 1883, 107.) G. Fl. rosy-lilac, having a yellow blotch on the lip, the lateral lobes of which are folded round the column and the broad emarginate front-lobe is somewhat flat. Brazil.

—— Var. **Hugueneyi.** (*L.* i. t. 5.) G. A large-flowered var. Fl. purple striate with red, with a yellow blotch veined with red on the disk. Matto Grosso, Brazil.

—— Var. **maxima.** (*Cat. Comp. Cont. d'Hort.* 1885, 3.) G. Fl. large and richly coloured; the sep. and pet. of a beautiful lilac-purple; the yellow spot on the lip veined with purple.

Cattleya obrieniana. (*J. of H.* 1890, xx. 25, f. 4.) G. A rose-tinted var. of *C. intermedia*.

Cattleya oweniana. (*G. C.* 1892, xii. 312; *J. of H.* 1892, xxv. 241, f. 33.) G. A var. of *C. labiata*, and not unlike that known as *hardyana*. It has creamy-white sep. and pet., and a lip richly marked with crimson and gold.

Cattleya parthenia. (*L.* vi. t. 276.) G. Garden hybrid between *C. fimbriata* and *C. Mossiæ*.

Cattleya Patrocinii. (*O. R.* i. 343.) G. A supposed natural hybrid between *C. Loddigesii* and *C. guttata leopardina*. It has the habit of *C. Loddigesii* with rose-purple fl. and a three lobed yellowish lip, the front lobe being deep rose-purple. Brazil.

Cattleya percivaliana magnifica. (*G. C.* 1895, xvii. 337.) G. A bright- and large-flowered form of the type.

—— Var. **Reichenbachi.** (*L.* i. t. 39.) G. This is a form of *C. labiata*, with rich mauve sep. and pet.; the front lobe of the lip rich deep purple, the purple running out into a point behind, on each side of which the lip is rich yellow with rich red venation.

Cattleya picturata. (*G. C.* 1878, viii. 584.) G. Garden hybrid.

Cattleya porphyroglossa punctulata. (*G. C.* 1887, ii. 98.) G. A var. having the sep. and pet. marked with crimson spots.

Cattleya porphyrophlebia. (*G. C.* 1885, xxiv. 552; *Gfl.* 1886, 156.) G. A garden hybrid between *C. intermedia* and *C. superba*.

Cattleya Princeps. (*G. C.* 1892, xi. 816.) G. A dull coloured var. of *C. schofieldiana*.

Cattleya reineckiana superbissima. (*Fl. and P.* 1884, 98.) G. A large-flowered sweet-scented form of *C. Mossiæ* with pure white fl., having the tube of the lip lined with violet, disk orange, and rays of violet lines and dots towards the margin.

Cattleya resplendens. (*G. C.* 1885, xxiii. 692.) S. A supposed natural hybrid between *C. schilleriana* and *C. granulosa*.

Cattleya Rex. (*G. C.* 1890, viii. 684; *L.* vi. t. 265.) S. A handsome flowered plant of the *labiata* group, and probably a var. of *C. aurea*, being most like *C. aurea imschootiana*.

Cattleya Roezlii. (*G. C.* 1882, xviii. 457.) G. A var. of *C. Mossiæ*, with two bright yellow eyes behind the purple apex of the lip. Colombia.

Cattleya schilleriana. (*Fl. des S.* 1877, t. 2286.) S. Pseudobulbs clavate, bearing 1–2 thick dull green elliptic-oblong obtuse l., and a scape with 1 large fl. Sep. and pet. reddish-brown, tinged at base and apex with green. Labellum whitish at base; the broad front lobe purple, edged with white and toothed. Brazil.

—— Var. **Lowii.** (*G. C.* 1892, xii. 138; *J. of H.* 1892, xxv. 187, f. 26.) S. Fl. lavender-blue, the lip being streaked with a darker shade of the same colour.

—— Var. **amaliana.** (*L.* ii. t. 87; *G. C.* 1887, ii. 108.) S. Form with a very large broad front lobe to the lip, which is densely veined with bright purple on a white ground, and has a yellow disk. Brazil.

—— Var. **aulcotensis.** (*G. C.* 1895, xviii. 154.) G. A form with large fl., having rose-tinted sep. and pet. and the front part of the lip of the clear bright rich crimson purple usually observed in *C. Warscewiczii*.

Cattleya schofieldiana. (*G. C.* 1882, xviii. 808; *W. O. A.* t. 93.) G. Pseudobulbs 16 in. high, bearing two broad l. Sep. and pet. greenish-yellow spotted with crimson, the pet. narrow at the base, very broad and obtuse at the apex: lip like that of *C. granulosa*, rich purple, with whitish side lobes, the middle lobe covered with lamellæ and papillæ. [Syn. *C. granulosa*, Lindl. var. *schofieldiana*.]

Cattleya Schœrderæ. (*G. C.* 1887, i. 512.) [*C. labiata*, Lindl. var. *Schrœderæ*.]

Cattleya schrœderiana. (*G. C.* 1883, xx. 102: 1896, xx. 73. f.) G. Pseudobulbs stick-like, 4 in. high, bearing two very stout oblong l. Peduncle 2 flowered. Fl. purple with a mauve hue: lip with very small basal auricles, a long parallel-sided claw, and a transverse oblong apiculate blade.

Cattleya schrœderiana leyswoodiensis. (*J. of H.* 1892, xxiv. 397. f. 69.) G. Fl. remarkable for the width and crispness of its segments, which are nearly pure white, with a blotch of orange in the throat.

Cattleya scita. (*G. C.* 1885, xxiv. 489; *Gfl.* 1886, 156.) G. Allied to *C. guttata*. The sep. and broad waxy pet. are pale ochre, with light purple blotches and shades. Lip purple, with pale sulphur side lobes, having purple edges, and a white disk with purple lines. Perhaps a natural hybrid.

Cattleya Skinneri alba. (*G. C.* 1877, vii. 810.) G. A var. with pure white fl. with purplish markings, and some sulphur yellow on the lip. Costa Rica.

—— Var. **oculata.** (*Veitch Man. Cattl.* 46.) G. A var. with a large maroon-purple blotch on the lip.

Cattleya sororia (*G. C.* 1887, i. 40. *Veitch Man. Cattl.* 87; *W. O. A.* t. 307.) G. Like *C. Harrisoniæ*. Sep. tipped with pale green; pet. marked with numerous dark spots; lip white with light purple margins, a few dark purple lines at the base, and some purple spots on the stalk. The front lobe of the lip is triangular, retuse, emarginate, with some asperities on the disk. Brazil.

Cattleya speciosissima buchananiana. (*W. O. A.* t. 261; *G. C.* 1887, i. 46.) G. This is a var. of *C. labiata*, with large fl. of a delicate lilac. The front part of the lip is rich magenta, with a magenta stripe along the centre of the disk, and the mouth of the tube marked with light yellow. Venezuela.

—— Var. **malouana.** (*L.* i. t. 47.) G. A fine form with large fl. of a rich rose purple, the lip veined with darker colour, and whitish around the mouth of the tube.

—— Var. **sanderiana.** (*G. C.* 1892, xii. 312.) G. One of the handsomest and purest of white Cattleyas.

Cattleya statteriana. (*G. C.* 1892, xii. 378; *J. of H.* 1892, xxv. 227, f. 38.) [*C. aurea*, Linden, var. *statteriana*.]

Cattleya suavior. (*Veitch Man. Cattl.* 92.) G. Garden hybrid between *C. intermedia* and *G. Mendelii*.

Cattleya superba alba. (*G. C.* 1890, viii. 620.) G. Described as having pure white flowers. Brazil.

Cattleya super-Forbesii. (*G. C.* 1896, xx. 90.) S. A garden hybrid between *C. superba* and *C. Forbesii*.

Cattleya Trianæ amplissima. (*L.* xii. tt. 530–1.) G. Lip white, with a red patch in front and yellow at the throat. Sep. and pet. white.

—— Var. **Annæ.** (*L.* i. t. 31.) G. A handsome form, with light rosy-purple sep. and pet.; lip dark purple, having the inside of the tube whitish, with a two-lobed yellow blotch in front.

—— Var. **ardens.** (*L.* xii. tt. 530–1.) G. Lip as in var. *superba*. Pet. and sep. pink.

—— Var. **arkleana.** (*O. R.* 1895, 103.) G. A var. with large fl. Lip 2 in. across and coloured purple-crimson.

—— Var. **Ashtoni.** (*G. C.* 1895, xvii. 210.) G. A var. with a very broad open lip.

—— Var. **atrata.** (*J. O.* 1896, 40.) G. Flowers large; sep. and pet. very pale rose, the rounded lip deeply coloured.

—— Var. **broomeana.** (*G. C.* 1893, xiii. 290.) G. A var. with broad nearly white segments and a blotch of glowing crimson on the labellum.

—— Var. **clinkaberryana.** (*G. C.* 1895, xvii. 168.) G. A large-flowered variety.

—— Var. **courtauldiana.** (*G. C.* 1895, xvii. 295.) G. A var. with a bright violet-crimson lip.

—— Var. **dulcis.** (*L.* xii. tt. 530–1.) G. Lip with a yellow patch in the throat, encircled by a pink ring.

—— Var. **festiva.** (*L.* xii. tt. 530–1.) G. Lip deep red; throat yellow; pet. and sep. pinkish.

—— Var. **formosa.** (*W. O. A.* t 108.) G. A form with pale mauve sep. and pet., and a rich magenta lip with yellow disk, on which are radiating streaks of darker yellow.

—— Var. **fulgens.** (*G. C.* 1890, vii. 336.) G. A finely formed var. with rich crimson labellum.

Cattleya Trianæ Gravesiæ. (*G. C.* 1893, xiii. 357.) G. A var. with narrow l. and pseudobulbs and large fl. with a red blotch on the labellum.

—— Var. **hardyana.** (*G. C.* 1879, xi. 366.) G. A fine var. with white fl. washed with very pale purple on the pet. The front part of lip warm purple with a paler border, and a light ochre central line.

—— Var. **hooleana.** (*W. O. A.* vi. t. 265.) G. A form of *C. labiata Trianæ*, with the entire lip of rich magenta marked with two curved clavate orange-yellow spots in the throat.

—— Var. **majestica.** (*L.* xii. tt. 530–1.) G. Lip red in front and at the margin; throat yellow.

—— Var. **marginata.** (*G. C.* 1890, vii. 336.) G. Remarkable in having a large labellum, coloured rich crimson and edged with white.

—— Var. **massangeana.** (*W. O. A.* t. 242.) G. [*C. labiata*, Lindl. var.]

—— Var. **Osmanii.** (*F. M.* t. 361.) G. Sep. and pet. clear mauve: lip purple in the front part, with lighter margins and side lobes; disk yellow.

—— Var. **pallida.** (*L.* v. t. 231.) G. A delicately coloured form, the whole fl. being of a pale rose, with the disk of the lip yellow.

—— Var. **purpurata.** (*L.* v. t. 229.) G. A form with light mauve sep. and pet., and a rich magenta lip with a yellow throat.

—— Var. **regalis.** (*L.* xii. tt. 530–1.) G. Whole lip deep red.

—— Var. **rœblingiana.** (*G. C.* 1895, xvii. 167.) G. A colour-variety.

—— Var. **russelliana.** (*W. O. A.* t. 219; *G. C.* 1886, xxv. 266.) G. A form with pale mauve sep. and pet., and the front lobe of the large lip of a deep magenta with a bilobed yellow blotch at its base. Colombia.

—— Var. **schrœderiana.** (*G. C.* 1886, xxv. 266.) G. A form with unusually long pet. and a green blotch at the base of the column.

Cattleya Trianæ splendens. (*L.* xii. tt. 530–1.) G. Pet. and sep. white; lip as in var. *festiva*.

—— Var. **splendidissima.** (*Fl. and P.* 1884, 58; *W. O. A.* t. 150.) G. A white-flowered form, with a dark purple-magenta lip.

—— Var. **striata.** (*L.* v. t. 232.) G. A remarkable form with the sep. and pet. of a rosy purple marked with a broad carmine central stripe; the lip carmine, with a yellow disk.

—— Var. **vanneriana.** (*G. C.* 1886, xxv. 331.) G. A fine var., with a broad orange central stripe on the lateral sep. Lip with a fine purple apex, orange disk, and light rose side lobes.

—— Var. **virginalis.** (*G. C.* 1895, xvii. 295.) G. Fl. white, with pale pink front to lip.

Cattleya triophthalma. (*G. C.* 1883, xx. 526.) G. A garden hybrid between *C. eroniensis* and *C. superba*.

Cattleya Vedasti. (*O.* 1891, 48. t.) G. A garden hybrid between *C. Loddigesii* and *C. Pinelli marginata*.

Cattleya velutina Lietzei. (*Gfl.* 1888, iii. 49, t. 1265; and *G. C.* 1888, 235.) G. Sep. narrow lanceolate, acute, of a dusky orange, with a few purple dots; broader lanceolate wavy pet., ochreous with purple dots; lip roundish-flabellate white veined with purple. Brazil.

—— Var. **punctata.** (*Gfl.* 1888, 51.) G. Fl. larger, the sep. and pet. thickly dotted with purple, and the front lobe of the lip margined with yellow. Brazil.

Cattleya venosa. (*O. R.* 1894, 132.) G. Supposed to be a natural hybrid between *C. harrisoniana* and *C. Forbesii*.

Cattleya Victoria-regina. (*G. C.* 1892, xi. 586, ff. 115–116; *R. H. B.* 1892, 198, f. 20.) S. Very similar to *C. Leopoldi* in pseudobulb, l., and infl. It is described as having from six to twenty fl. on a spike, each 6 in. across with reddish segments and a white lip lined with rose and blotched with crimson. Brazil.

Cattleya virginalis. (*L.* iii. t. 101.) G. A large white-flowered sp., with the disk and tube of the lip yellow. The sep. are lanceolate, acute: pet. broad, elliptic, obtuse; lip tubular, entire with a frilled front lobe. [*C. Eldorado*, var.]

Cattleya Wallisii. (*Fl. and P.* 1882, 75.) G. A species with large white fl. marked with a yellow blotch on the disk of the lip. Brazil.

Cattleya Warneri formosa. (*G. C.* 1893, xiii. 641.) S. A var. with large richly coloured flowers.

Cattleya warocqueana. (*W. G.* 1890, 446: *Gfl.* 1890, 448.) G. [*C. labiata*, Lindl. var.]

—— Var. **amethystina.** (*L.* vi. t. 268.) G. A form with deep rosy-purple sep. and pet., and a rich maroon-purple lip with an orange-yellow throat.

Cattleya Warscewiczii franconvillensis. (*G. C.* 1893, xiv. 150.) S. A var. with pure white fl. with a blotch of rich purplish-crimson on the lip.

—— Var. **purpurea.** (*G. C.* 1893, xiii. 752.) G. A var. with deep purple flowers.

—— Var. **Sanderæ.** (*G. C.* 1893, xiii. 752.) G. Fl. of a warm crimson colour, with a velvety labellum.

—— Var. **variegata.** (*O. R.* 1895, 278.) G. Fl.-segments variegated with streaks and blotches of rosy purple on a lighter ground.

Cattleya wellsiana. (*G. C.* 1893, xiii. 639.) S. A garden hybrid between *C. superba* and *Lælia elegans?*

Cattleya Wendlandii. (*G. C.* 1894, xvi. 447.) G. A garden hybrid between *C. bowringiana* and *C. Warscewiczii*.

Cattleya Whitei. (*Fl. and P.* 1882, 140; *Gfl.* t. 1159.) G. A distinct form. with stout short pseudobulbs, with 1–2 thick oblong l., and short 2-flowered scape. Fl. large, dilute dull purple, with a fringed magenta-purple lip, having the disk orange Brazil.

Cattleya wilsoniana. (*G. C.* 1877. viii. 72.) G. A form with tall slender stems and very elegant fl. Sep. and pet. deep purple; lip white with a yellow blotch at base; the disk and angular side-lobes violet.

Cattleya Zenobia. (*G. C.* 1887, ii. 552.) G. Garden hybrid.

Cautleya lutea. (*B. M.* t. 6991; *R. H.* 1888, 480; *G. C.* 1888, iii. 466, as *Cuttleya lutea.*) Scitamineæ. G. per. [*Roscœa elatior*, Sm.] North-west Himalaya.

Cavendishia spectabilis. (*Bull Cat.* 1889, 7.) Vacciniaceæ. G. A subscandent shr., with oblong acuminate l., of a bright reddish-bronze on the young growths, changing to bright green. Fl. in short compressed racemes, tubular, slightly swollen below, white, shaded with pink, and when in bud covered with carmine bracts. Colombia.

Ceanothus americanus variegatus. (*R. H. B.* 1889, 269.) Rhamnaceæ. H. H. shr. Garden var., having the l. bordered with yellow.

Ceanothus axillaris. (*R. H.* 1875, 8.) H. H. shr., with long slender branches. L. alternate, elliptic, obtuse, crenate. Fl. in dense sessile axillary clusters, pale lilac-rose.

Ceanothus Fendleri. (*Gfl.* 1893, 536; *N. G. M.* 1895, 88, f. misprinted *Fenolleo*) H. H. A much branched thorny bush 1–2 ft. high with egg-shaped or elliptic l. silky below and dark green, glossy, and smooth above. Fl. snow-white. Colorado.

Ceanothus ovalis. (*G. and F.* 1888, 249.) H. H. shr. 2–3 ft. high, with narrow elliptic obtuse or acute crenulate l., and dense corymbose umbels of white flowers. Texas.

Ceanothus prostratus. (*Gfl.* 1889, 139.) H. H. shr. L. small, opposite, elliptic or obovate, entire or toothed. Fl. blue, axillary. Oregon.

Cecropia dealbata. (*Williams' Cat.* 1887, 21.) Urticaceæ. S. A fine Snakewood tree with large soft pubescent palmate l., light green above, glaucous beneath. Colombia.

Cedrela sinensis. (*F. and P.* 1876, 175.) G. Simarubaceæ. The correct name for the tree known in gardens as *Ailanthus flavescens.*

Cedrus atlantica fastigiata. (*R. H.* 1890, 32, f. 9; *G. C.* 1890, vii. 197.) Coniferæ. H. shr. or tree. A pyramidal var. with ascending branches.

Celmisia Lindsayi. (*B. M.* t. 7134; *H. G.* 1890, 505.) Compositæ. G. Stems densely tufted, 3–6 in. long, upper parts leafy; l. 2–4 in. long, oblong-lanceolate, obtuse, very coriaceous, dark green and shiny above, white underneath. Flower-stem 5–6 in. high; bracts linear, 1–2 in. long. Fl. 1–2 in. in diam., white; ray-florets 30–40, tips 3-toothed; disk-florets yellow. New Zealand.

Celmisia Munroi. (*B. M.* t. 7496.) G. Whole plant except the upper surface of the l. and florets clothed with a snow-white cottony adpressed wool. Stem short, crowned with a thick mass of erect and recurved linear-lanceolate leaves. Scapes erect, one-flowered. Head 1–2½ in. across; disc-florets golden yellow; ray-florets white. New Zealand.

Celmisia spectabilis. (*B. M.* t. 6653.) G. herb. per., ½–1 ft. high, with numerous erect lanceolate or elliptic lanceolate acute l., green above, with impressed parallel veins, densely woolly tomentose beneath; scapes several, white, woolly, with linear bracts; heads solitary, 2 in. in diam.; rays white; disk yellow. New Zealand.

Celtis reticulata. (*Engros-Cat. des Nat.-Arb. Zösch.* 1890, 19.) Urticaceæ. H. tree, with cordate-ovate l., more or less oblique at the base, very rough above and very strongly reticulate-veined beneath. Texas.

Centaurea Margarita. (*G. M.* 1895, xxxviii. 62.) Compositæ. H. A var. of *C. odorata* with dwarf habit and white sweet-scented flowers.

Centaurea odorata alba. (*B. T. O.* 1893, 105, f. 12.) H. A var. differing from the type in having white fl. [Syn. *C. Margaritæ*, Sprenger.]

Centrosolenia ænea. (*Ill. H.* 1875, t. 222; *Lind. Cat.* 1876, 4.) Gesneraceæ. S. per. L. lanceolate, acute, 8–10 in. long, 3–4 in. broad, dark green, with rich bronzy metallic reflections. Fl. axillary, pedunculate, creamy-white; corolla tube short, ventricose before the middle, saccate at base; limb 5-lobed, spreading. Colombia.

Cephaelis Bearii. (*H. G.* 1888, 571.) Rubiaceæ. S. shr. with small inconspicuous umbels of flowers. Mexico.

Cephaelis tomentosa. (*B. M.* t. 6696.) S. shr. hairy all over, with large elliptic-lanceolate acute green l., and terminal pedunculate heads of yellowish fl., enclosed by two very large scarlet bracts. Guiana.

Cephalandra palmata. (*B. T. O.* 1893, 331.) Cucurbitaceæ. S. A per. with a very large bulbous root-stock, ivy-like l. and small scarlet fruits marbled with white. South Africa.

Cephalanthus natalensis. (*B. M.* t. 7400.) Rubiaceæ. G. A small shr. with Fuschia-like l. 1 in. long and small pink and green fl. in globose terminal peduncled heads. South Africa.

Cephalanthus occidentalis angustifolius. (*R. H.* 1889, 281, f. 71.) H. shr. A form with the l. narrower than in the type, and lanceolate.

Cephalotaxus pedunculata sphæralis. (*G. C.* 1884. xxi. 113, 117, f. 23.) Coniferæ. H. A form differing from the type in having brownish-coloured shoots and globose berries. China.

Cerastium decalvans. (*G. C.* 1892. xii. 615.) Caryophyllaceæ. H. per. with sub-ligneous stems, and covered with tufts of wool. Fl. white, numerous. Servia.

Cerasus acida pyramidalis. (*R. H.* 1886, 460.) Rosaceæ. H. tree. A garden var. of the Montmorency Cherry, with erect branches, forming a pyramidal growth resembling that of the Lombardy Poplar.

Cerasus serotina cartilaginea. (*R. H. B.* 1889, 269.) H. A form with long smooth somewhat coriaceous l. like those of common Cherry-Laurel.

Cerasus serratifolia rosea. (*R. H.* 1877, 390.) H. A var. with slightly rose-tinted double flowers.

Ceratotheca triloba. (*G. C.* 1887, ii. 492–3, f. 99; *B. M.* t. 6974.) Pedaliaceæ. G. or H. H. annual. A herb of tall habit, with opposite stalked l., the lower ones large and 3-lobed, the uppermost smaller, cordate or ovate-lanceolate, lobed and toothed. Fl. large, deflexed, in long racemes, tubular with an oblique limb, of a delicate mauve, whitish inside, the lower lobe marked with purple lines longer than the rest, ovate, and not spreading as the rest are. Natal.

Ceratozamia fusco-viridis. (*Bull Cat.* 1879, 4.) Cycadaceæ. S. Trunk furnished with rather broad scales surrounding each of the petioles, which are nearly terete above and rough along the edges. L. 3–4 ft. long, arching, pinnate; leaflets 6–7 in. long, sessile, lanceolate, acuminate; young l. bronzy-chocolate, ultimately deep green. Mexico.

Cereus cæspitosus. (*B. M.* t. 6669.) Cactaceæ. S. Succulent, much resembling *C. pectinatus*, but differing in having more numerous (80–100) pulvilli on the fl. tube, and more numerous pet. to the bright rose-purple flowers. New Mexico and Texas.

Cereus Engelmanni. (*Gfl.* t. 1174, f. a.) S. Stem ovate-cylindrical, with 11–13 ridges. Spines radiating, about 13 in a tuft. Fl. 3–4 in. in diam., rose-carmine. California.

Cereus Fendleri. (*B. M.* t. 6533.) S. A species, with ovoid 9–12-angled stem: angles with somewhat distant tufts of whitish or pale brown spines, 7–10 radial, one central, 1–1½ long. Fl. 3 in. in diam., bright rose. New Mexico.

Cereus hypogæus. (*Gfl.* t. 1085.) S. Minute underground unarmed stem, and cylindric or clavate 7–8-angled aerial stems; tubercles with 2–5 or more setiform spines, and 3–5 longer central ones. Fl. 2 in. long, tube short, with a few spine tufts; pet. oblong mucronate, purplish, with yellow margins.

Cereus paucispinus. (*B. M.* t. 6774.) S. A dwarf species, with rather deformed stout 5–7-angled stems; the angles tuberculate and bearing 3–7 stout radiating straight spines. Fl. about 2½ in. long and about 2 in. broad, dark red, with tufts of spines on the green calyx-tube. Pet. very obtuse. New Mexico.

Cereus Pecten-aboriginum. (*G. and F.* 1894, 334, f. 54.) S. Trunk 1 ft. in diam., 20–30 ft. high, with 10 or 11 ribs, armed with straight ash-coloured spines. Fl. 2–3 in. long, purple and white. Sonora, Mexico.

Cereus Philippii. (*Gfl.* t. 1079, f. 1.) G. Stems 8–10 angled: angles tubercled; tubercles with about 8 short and 4 or 5 long spines. Fl. small, about 1½ in. long, campanulate, yellow, with reddish-tinted segments. Stamens in two distinct whorls, the outer arising from the base of the pet., the inner whorl united in a tube around the style. Chili.

Cereus Pringlei. (*G. and F.* 1889, 364, f. 92.) S. Many-angled stems, attaining a height of 30 ft. Fl. small, white tinged with purple. Mexico.

Cereus sargentianus. (*G. and F.* 1891, 436, f. 69.) S. Stems up to 15 ft. high, 5–6-angled; spines ½ in. long in dense tufts; fl. small, pink. Lower California.

Ceropegia Barkleyi. (*B. M.* t. 6315.) Asclepiadaceæ. S. per. with tuberous rootstock, producing annually 2–4 slender scrambling stems, 6–12 in. long, glabrous, greyish-green. L. 1–1½ in. long, opposite, ovate-lanceolate acute, fleshy, dark green with white nerves above, pale greyish-green beneath. Peduncle 2-flowered, ½–1 in. long. Corolla 1¼–1½ in. long, erect; tube slender, curved, globose-inflated at base, funnel-shaped where the subulate-filiform lobes pass off; these first converge, then diverge, and finally horizontally incurve and unite at the very tips, ciliated along the middle part, outside pale green, tinged with pink on the tube, inside green, veined and marked with purple-brown. Outer corona annular, 10-toothed, inner of 5 rounded lobes. South Africa.

Ceropegia debilis. (*G. C.* 1895, xviii. 358.) S. L. 1 in. long. Fl. pale purplish on weak pendulous stems. Nyasaland.

Ceropegia Monteiroæ. (*B. M.* t. 6927.) S. climber, remarkable for its singular fl. Stem rough. L. 1–2 in. long, lanceolate, bluntly pointed, wavy. Cymes 3-flowered, axillary. Fl. 2 in. long, trumpet-shaped, with a dome-like canopy over the mouth, the colour is white and green, spotted with purple-brown, and fringed with purple hairs. Delagoa Bay.

Cespedesia Bonplandi. (*Lind. Cat.* 3.) Ochnaceæ. S. tree. L. tongue-shaped, attaining 3 ft. in length, crenulated; nerves prominent, horizontal. Fl. large, bright orange-yellow; panicle lax, 12–16 in. long. Tropical America.

Cestrum Hartwegii pubescens. (*G. C.* 1883, xix. 656.) Solanaceæ. G. A climber, everywhere pubescent, with large elliptic acute l., and large clusters of bright crimson flowers.

Chænactis tenuifolia. (*Gfl.* 1888, 330, t. 1275, f. 2; *G. C.* 1888, iii. 806.) Compositæ. H. annual, 9–15 in. high, leafy and branching. L. pinnately or bipinnately cut into narrow linear lobes. Heads corymbose, on short peduncles, yellow. California.

Chænomeles japonica simirenkiana. (*R. H.* 1888, 519.) Rosaceæ. H. shr. A garden sport of *Pyrus japonica*, with cream-coloured leaves.

—— Var. **serotina.** (*R. H.* 1894, 424, f. 155, 156.) H. A late flowering form of the typical *Pyrus japonica*.

—— Var. **Simonii.** (*R. H.* 1883, 275.) H. shr. This is a dwarf semi-double variegated form of *Pyrus japonica*.

Chamæcerasus Alberti. (*R. H.* 1886, 547.) Caprifoliaceæ. H. shr. A species of *Lonicera* with slender branches; l. soft, linear, somewhat like those of the Rosemary, of a greyish-green, glaucous beneath; fl. rose-coloured.

Chamæcerasus alpigena nana. (*R. H.* 1887, p. 63.) H. shr. Garden var. of *Lonicera alpigena*.

Chamæcladon metallicum. (*Ill. H.* 1884, t. 539; *Cat. Comp. Cont. d'Hort.* 1885, 3, f.) Araceæ. S. L. velvety, elliptic, somewhat acute, 3–5 in. long, 2½–3 in. broad; upper surface of various shades of coppery-green in the young state, becoming dark bronzy-green when older; under side purplish. Borneo.

Chamæcladon rubens. (*Bull Cat.* 1881, 16.) S. A small aroid of dwarf tufted habit, with elliptic l. 3–4 in. long, olive or bronzy-green above, purple beneath. Spathe purplish. Borneo.

Chamæcyparis lawsoniana Rosenthalii. (*Gfl.* 1886, 86.) Coniferæ. H. A var. differing from the type in its pyramidal growth, and the branchlets not drooping. [*Cupressus lawsoniana*, Andr. var.]

Chamæcyparis pisifera aurea. (*R. H.* 1875, 220.) H. shr., like the type but much more branched; the branches more compact, and of a golden yellow colour.

—— Var. **casuarinifolia.** (*W. G.* 1888, 477.) H. Garden variety.

Chamædorea arenbergiana. (*B. M.* t. 6838.) Palmæ. S. Stem distantly ringed, 5–6 ft. high. L. 6–7 ft. long, with a slender petiole, and 10–15 pair of lanceolate acuminate leaflets 12–18 in. long. Spathes forming a sheathing tube, concealing the peduncle of the spadix, which is umbellately branched in the male, simple in the female, densely covered with yellowish flowers. Guatemala.

Chamædorea eburnea. (*Bull Cat.* 1877, 3.) S. Stems and petioles smooth, slightly glaucous. L. in young plants broad and bilobed, in older plants broken up into broad segments, green with ivory-white midribs. Colombia.

Chamædorea formosa. (*Bull Cat.* 1876, 4.) S. L. pinnate; petiole smooth with two channels down the face on which the leaflets are set; leaflets numerous, alternate, linear-lanceolate, 18 in. long, 3¼ in. wide, drawn out into very long thread-like points. Solima, Colombia.

Chamædorea gratissima. (*Lind. Cat.* 1896, 13.) S. Described as a species of robust habit with large l. resembling those of *C. Verschaffeltii*.

Chamædorea polita. (*Bull Cat.* 1884, 12.) S. Stems and petioles smooth; l. of young plant bifid; of older plants breaking up into two pairs of pinnæ, with a large terminal leaflet. Mexico.

Chamædorea pulchella. (*Cat. Comp. Cont. d'Hort.* 1885, 4.) S. L. gracefully arched, pinnate, having very numerous linear leaflets.

Chamædorea stolonifera. (*B. M.* t. 7265.) S. Stems 3 ft. high, ½ in. thick, stoloniferous; l. 10 in. long, plicate, bilobed, green; spadices axillary, branched; fl. yellow. South Mexico.

Chamædorea wobstiana. (*Cat. Comp. Cont. d'Hort.* 1885, 4.) S. Resembling *C. Sartorii*, but more robust, and with more numerous leaves.

Chamæpeuce afra. (*Gn.* 1894, 47.) Compositæ. H. H. A handsome thistle-like plant with a rosette of dark green white-blotched l. and a flower-stem about 2½ ft. high bearing from 8 to 12 bright purple heads. Orient.

Chamæpeuce Sprengeri. (*Fl. and P.* 1883, 42.) H. Garden hybrid between *C. diacantha* and *C. Casabonæ*.

Chamæranthemum pictum. (*G. C.* 1878, ix. 527.) Acanthaceæ. S. shr. L. sessile, obovate-oblong, tapering at base, shortly acuminate at apex, green with orange edges and a large irregular central silvery blotch; young l. covered with stiff, appressed orange-coloured hairs. Brazil.

Chamærops humilis dactylocarpa. (*B. T. O.* 1889, 80, t. 3; *H. G.* 1889, 377.) Palmæ. G. A var. with elongated fr.

Chamelum luteum. (*Gn.* t. 1129, f. 69.) Iridaceæ. G. A singular little plant, with slender creeping rhizome, and linear filiform curving hairy l. 2½ in. long, short scapes, and small yellow fl. rising to about the level of the l., the slender tube being about 1½ in. long; perianth-segments linear-lanceolate, acute. Chili.

Cheilanthes californica. (*Fl. and P.* 1882, 155.) Filices. G. A small evergreen fern, with densely-tufted quadripinnatifid fronds, 6–8 in. high. California.

Cheilanthes chlorophylla. (*Bull Cat.* 1884, 12.) S. Fronds ovate-lanceolate, tripinnatifid, having distant lanceolate pinnæ and pinnules, the latter with entire linear-oblong lobes. Stipes chestnut-brown, shining. Brazil.

Cheiranthera parviflora. (*B. M.* t. 7261.) Pittosporaceæ. G. Twiner with the habit of *Sollya heterophylla*, the stems being wiry, the l. linear, and the fl. 1 in. across, star-shaped, purple, solitary on short lateral branches. West Australia.

Chevalliera crocophylla. (*B. H.* 1885, 81.) Bromeliaceæ. S. L. clear green spotted and marbled with dark green. Fl.-stem robust, 3 ft. or more high, bearing a compact spherical head of small green fl. with spiny-edged bracts. During the flowering the outer l. of the plant assume a beautiful rose colour. [*Æchmea.*] Brazil.

Chevalliera germiniana. (*B. M.* 1884, 230, t.) S. L. broad, strap-shaped, spreading, arched, wavy, 2–2½ ft. long, 2½–3 in. broad; margins finely toothed. Fl. stem elevated above the l.; spike very dense; bracts scarlet; fl. much shorter than the bracts, pink. [*Æchmea germiniana*, Baker.]

Chevalliera gigantea. (*Jard.* 1888, 8, f.; *R. H.* 1888, 370, f. 83.) S. L. 6½–9 ft. long, erect, slightly recurving at the acute apex, 2–3 in. broad, channelled down the face, glaucous green with black marginal spines. Fl. stem 18–20 in. long, stout, clothed with rose-coloured bracts. Spike dense, about 4 in. thick. Fl. undescribed. [*Æchmea.*] Brazil.

Chionodoxa Luciliæ. (*B. M.* t. 6433; *G. C.* 1879, xi. 468, f. 64.) Liliaceæ. H. Fl. Scilla-like, bright blue. Asia Minor.

—— Var. **alba.** (*Fl. and P.* 1882, 75.) H. A var. with white flowers.

—— Var. **Alleni.** (*Gard.* 1892, xlii. 17.) H. A large-flowered form, with blue, white and pink fl. Mt. Taurus.

Chionodoxa Luciliæ × Scilla bifolia. (*Gard.* 1891, xxxix. 308.) H. Garden hybrid.

Chionodoxa nana. (*B. M.* t. 6453.) H. L. two, 4–6 in. long, linear, channelled down the face. Scape slender, as long as the l., 2-flowered. Fl. white, flushed with pale blue. Crete.

Chionodoxa sardensis. (*Gfl.* 1885, 277.) H. Resembling *C. Luciliæ*, but differing by its smaller, flatter, and darker blue fl. with a white eye.

Chionographis japonica. (*B. M.* t. 6510.) Liliaceæ. H. per. glabrous herb, interesting on account of its peculiar floral structure. L. rosulate, 2–3 in. long, elliptic, acute, toothed. Fl.-stem 1 ft. high, with a few scattered linear l. Fl. white, in a rather loose spike. Perianth segments 3 or 4, the two or three lower ones being suppressed, narrow linear, spreading. Stamens 6, short and stout. Japan.

Chionophila Jamesii. (*G. and F.* 1888, 79, f. 15.) Scrophulariaceæ. H. alpine per. 4–5 in. high, glabrous, with thickish entire oblanceolate radical l., and scape-like fl. stems, bearing 1–2 pairs of linear l., and a one-sided dense raceme of small two-lipped cream-coloured fl., bearded at the throat of the tube. Colorado.

Chirita depressa. (*B. M.* t. 7213.) Gesneraceæ. G. A dwarf species with a short rhizome, rosulate green spathulate l. and stoloniferous habit. Fl. tubular, *Gloxinia*-like, purple. China.

Chirita hamosa. (*R. H.* 1896, 184. t.) S. An interesting species with peduncle adnate to the leaf-stalk. Fl. lilac blue, showy. India.

Chlorophytum arundinaceum. (*G. C.* 1876, vi. 260.) Liliaceæ. G. L. oblanceolate, bright green, 1 ft. long, 1 in. broad. Fl. white, in a close narrow panicle about 6 in. long, and reaching to about the top of the l. Eastern Himalaya.

Chlorophytum brachystachyum. (*G. C.* 1893, xiii. 710.) S. Allied to *C. stenopetalum*. It has *Eucomis*-like l., 8 in. long, and a dense raceme of small white fl. Nyasaland.

Chlorophytum Kirkii. (*G. C.* 1882, xvii. 108.) S. Like *C. elatum*, with subdistichous lanceolate bright green l. 1½–2 ft. long, 1–1¼ in. broad. Fl.-stem 15–16 in. high. Fl. small, white, in a rather dense raceme. East Tropical Africa.

Chlorophytum polyrhizon. (*G. C.* 1878, x. 396.) S. L. oblong, acute, sub-erect, crowded, bright green: racemes short, lax, few-flowered; fl. white, 1 in. in diameter. Zanzibar.

Chlorophytum rhizomatosum. (*G. C.* 1885, xxiv. 230.) S. A curious species with a long creeping rhizome, linear-falcate glabrous l., and a short fl.-stem, with a raceme of white fl. ½ in. in diameter. Zanzibar.

Chlorospatha Kolbii. (*Gfl.* t. 933.) Araceæ. S. Tuberous Aroid, producing a solitary long-stalked pedate l., with 7–9 oblong acute 3-nerved leaflets: from near the base of the leafstalk are produced 3–4 infl. on long slender peduncles, with narrow green convolute spathes; spadix with scattered papilliform ovaries at base, a few staminodes in the middle, and terminating in a clavate spike of crowded anthers, which are united in bundles of four. South America.

Chondrorhyncha Chestertoni. (*G. C.* 1879, xii. 648; *L.* ix. t. 405.) Orchidaceæ. S. Fl. like *C. fimbriata*, but the parts narrower, with long fringes to the pet. and lip. Colombia.

Chondrorhyncha lendyana. (*G. C.* 1886, xxvi. 103.) S. Fl. light yellow, the lip being darker. Lateral sep. spreading; pet. very large; lip large, elliptical, with a central bidentate callus.

Chorisia speciosa. (*Jard.* 1888, 270.) Malvaceæ. S. tree. L. on long petioles, digitate, leaflets 5–7, petiolulate, lanceolate, acuminate, serrate. Fl. axillary, solitary, pedicillate; large and showy, 3 in. in diam. Calyx irregularly 2–4-lobed, glabrous and shining outside, silky inside. Pet. oblong obtuse, spreading, yellowish with dark brown rays at the base, densely pubescent on the back. Stamens in a long tube surrounding the style, with fertile anthers at the apex, and a whorl of barren anthers near the base. Brazil.

Chorispora Greigi. (*Gfl.* t. 984.) Cruciferæ. H. annual, with radical pinnatifid l., and several stems about 6 in. high, ending in lax racemes of bright purple fl. Pods beaded, beaked at apex. Central Asia.

Chrysanthemum cinerariæfolium. (*B. M.* t. 6781.) Compositæ. H. L. mostly radical, bipinnatisect, light green, glandular-punctate; flower-stem a foot high or more, sparingly branched, peduncles one-headed; heads 1½ in. in diam.; rays white; disc yellow. From this plant the famous Dalmatian Insecticide powder is obtained. Dalmatia.

Chrysanthemum decaisneanum. (*K. B.* 1888, 98.) H. late-flowering per. 1–1½ ft. high, similar to *C. marginatum* in appearance, with obovate pinnatifid l., and larger radiate pale yellow heads. [Syn. *Pyrethrum decaisneanum*, Maxim.] Japan.

Chrysanthemum frutescens chrysaster. (*B. H.* 1880, 225, t. 12.) G. Known as *Etoile d'Or*.

Chrysanthemum hæmatomma. (*G. C.* 1888, iv. 36; *W. G.* 1888, 341.) G. or H. H. Suffrutescent. L. 2–3 in. long, ¾–1 in. broad, pinnatisect, with about 3 pairs of oblong obtuse toothed lobes. Peduncles long and naked, bearing solitary fl.-heads 2–3½ in. in diam., with white or rosy rays, and a dark purple disk. Madeira.

Chrysanthemum marginatum. (*K. B.* 1888, 99.) H. With tomentose stems and rounded corymbs of small dark yellow heads. L. cuneate-oblong, pinnatifid in the upper third tomentose beneath and on the edge. [Syn. *Pyrethrum marginatum*, Miq.] Japan.

Chrysanthemum multicaule. (*B. M.* t. 6930.) H. annual ½–1 ft. high, branching, with smooth glaucous l. and stems. L. fleshy, linear-spathulate, and coarsely pinnatifid, 1–3 in. long, ½–¾ in. broad, or smaller and trisect or pinnatisect with narrow segments. Fl. solitary on long peduncles, radiate, bright yellow 1½–2½ in. in diameter. Algeria.

Chrysanthemum nipponicum. (*W. G.* 1895, 11, f. 1.) H. H. A dwarf compact shrubby Ox-eye Daisy. Japan.

Chrysanthemum segetum grandiflorum. (*W. G.* 1888, 246.) H. Garden variety.

Chrysophyllum imperiale. (*B. M.* t. 6823.) Sapotaceæ. S. This is the plant that has long been cultivated as *Theophrasta imperialis*.

Chusquea abietifolia. (*B. M.* t. 6811.) Gramineæ. S. A graceful climbing bamboo, with wiry smooth stems; small rigid linear-lanceolate l., ½–1 in. long: and small terminal racemes, bearing 4–6 purplish spikelets. Jamaica.

Chysis oweniana. (*G. C.* 1893, xiv. 756.) Orchidaceæ. S. This is *C. bruennowiana*, Reichb. f., which was introduced about forty years ago. It resembles *C. aurea* in habit and bears several medium-sized fl. of a pinkish hue. Peru.

Chysis Sedeni. (*G. C.* 1880, xiii. 616.) S. Garden hybrid.

Cibotium Chamissoi. (*G. C.* 1879, xi. 495, f. 67.) Filices. S. tree fern, with bipinnate broadly ovate fronds, glossy green on both sides, the rhachis, midrib, and under side clothed with loose mealy hair-scales; pinnæ ovate-lanceolate, acuminate; pinnules linear-oblong, with an acuminate crenate-serrate apex, pinnatifid; the lobes oblong, blunt, crenate. [*Dicksonia.*] Sandwich Islands.

Cibotium glaucum. (*G. C.* 1879, xi. 494, f. 66.) S. Tree fern. Fronds tripinnate, ovate, glabrous, green above

very glaucous beneath; pinnæ ovate, 12-18 in. long; primary pinnules linear, acuminate, secondary pinnules sessile, the basal ones separate, oblong falcate, sub-acute, serrate-crenate. [*Dicksonia.*] Oahu, Sandwich Islands.

Cibotium Menziesii. (*Bull Cat.* 1878, 4.) S. Trunk stout, densely hair-scaly at crown. Fronds bipinnate, thick, coriaceous, glabrous: pinnæ large, oblong, acuminate, pinnatifid; the segments oblong, obtuse, almost entire. Base of stipes densely clothed with a very dark hair-like covering. [*Dicksonia.*] Sandwich Islands.

Cibotium pruinatum. (*Bull Cat.* 1878, 5.) S. Nearly allied to *C. Menziesii*, but taller, with the under-surface of fronds glaucous, and the pinnæ and primary pinnules more acuminate. [*Dicksonia.*] Sandwich Islands.

Cimicifuga japonica. (*Fl. des S.* t. 2363.) Ranunculaceæ. H. per. herb. L. all radical, trifoliolate: leaflets stalked, cordate at base, palmately 3–5-lobed, serrate. Fl. stems very tall, mostly simple, ending in long spikes of white fl., of which the very numerous stamens form the most conspicuous part. Japan.

Cinchona Calisaya. (*B. M.* t. 6434.) Rubiaceæ. S. tree. The true Calisaya Fever-bark. L. large, elliptic, obtuse, shining green above, pale beneath. Fl. in terminal panicles; corolla ½ in. long, salver-shaped, 5-lobed, pink, the lobes ciliate. Bolivia: Peru.

Cineraria albicans. (*G. C.* 1895, xvii. 39.) Compositæ. H. H. Stems 1–1½ ft. high, clothed with a white cottony tomentum. L. somewhat reniform or nearly circular in outline, cordate at the base, 5–7-lobed, the lobes usually trilobulate and many-toothed; corymb terminal, few-headed: fl. heads 7–8 lines in diam., and of a clear yellow. Natal.

Cineraria aurita. (*Gard.* 1890, xxxviii. 252, t. 770.) G. With silvery l. and large elegant racemes of bright purple and white fl. [*C. lanata.* Curt. *B. M.* t. 53.] Canary Islands.

Cineraria maritima aureo-variegata. (*G. C.* 1893, xiii. 641; *J. of H.* xxvi. 438, f. 78.) G. L. green, margined with creamy yellow.

Cirrhopetalum abbreviatum. (*G. C.* 1881, xvi. 70.) Orchidaceæ. S. A curious species, with a peduncle much shorter than the l., bearing a few small fl. Upper sep. triangular, subulate, fornicate, ciliate: lateral sep. cohering, short, broad, and blunt, all white, with numerous small purple spots in rows; the lip and ciliate pet. purple.

Cirrhopetalum amesianum. (*L.* vii. t. 314.) S. With 4-angled pseudobulbs, broad l., and umbels of rather large fl. The connate sep. are yellowish white, shaded with rosy-purple at the base, and the rest of the fl. is yellow. East Indies.

Cirrhopetalum brienianum. (*K. B.* 1893, 62.) S. Allied to *C. makoyanum*. Pseudobulbs ovoid, ½ in. long; l. oblong, 2¼ in. long; scape 9 in. long; fl. small, yellow and maroon. Borneo.

Cirrhopetalum Collettii. (*G. C.* 1891, ix. 614; *B. M.* t. 7198.) S. Pseudobulbs, with one thick and leathery l.; umbel 6-flowered, fl. 5 in. long, dark purple and yellow. Upper Burma.

Cirrhopetalum compactum. (*K. B.* 1895, 281.) S. Allied to *C. parrulum*. Pseudobulbs ovoid, small; l. 1 in. long; scape 2 in. long, bearing a few small, pale yellow fl. Tenasserim.

Cirrhopetalum delitescens. (*G. C.* 1882, xviii. 461.) S. Allied to *C. Macræi*, with ovate compressed pseudobulbs, solitary elliptic-oblong l., 3–5 in. long, and a slender scape 7–8 in. long, bearing 3 fl. about 2½ in. long, uniformly marbled with two shades of dark lurid purple. Hong-Kong.

Cirrhopetalum elegantulum. (*G. C.* 1891, ix. 552; *Gfl.* 1891, 359.) S. A small species. Fl. striped with maroon-purple on a pale ground. Madras.

Cirrhopetalum gracillimum. (*K. B.* 1895, 34.) S. Pseudobulbs 1 in. long, angular, 1-leaved; l. oblong, 2½ in. long; scape 6 in. long. Fl. small, reddish-purple. Burma.

Cirrhopetalum graveolens. (*O. R.* 1896, 308.) S. A large-flowered species with l. 12 in. by 5 in.; scapes 6 in. high: raceme 7 in. across, composed of about 13 strongly-scented fl. yellowish-green speckled with red; lip reddish-brown changing to deep-purple. [*C. robustum.* Rolfe.] New Guinea.

Cirrhopetalum lendyanum. (*G. C.* 1887, ii. 71.) S. Pseudobulbs pear-shaped, 4-angled, reddish. L. cuneate-oblong, acute. Peduncle wiry, bearing an umbel of small whitish fl., with a greenish-yellow hue. Upper sep. oblong, acuminate; lateral sep. linear-acuminate, free, twice as long as upper sep. Pet. oblong, acuminate, nearly as long as upper sep. Lip compressed, triangular as seen from the side, 2-keeled. [Syn. *Bulbophyllum lendyanum*, Reichb. f.]

Cirrhopetalum makoyanum. (*G. C.* 1879, xi. 234; *B. M.* t. 7259.) S. Pseudobulbs short, 4-angled. L. stalked oblong-ligulate, blunt, coriaceous. Fl. light yellow, 8–10 in an umbel; lateral sep. with a few brown spots and lines at base; pet. with three brown lines; the lip brownish; the odd sep. and the pet. ciliate. Minas Geraes, Brazil.

Cirrhopetalum mastersianum. (*L.* vi. t. 255.) S. Pseudobulbs ovoid-quadrangular, each bearing one l. 4–5 in. long by 1 in. broad. Umbels of 6–8 fl. on purplish drooping scapes. The fl. are about 1½ in. in length, and of a deep yellow, with the upper half of the lateral sep. brown, and the lip brownish-purple. East Indies.

Cirrhopetalum mysorense. (*K. B.* 1895, 34.) S. Allied to *C. maculosum*. Pseudobulbs angled, 1 in. long, monophyllous; l. 3 in. long; scape 4 in. long; fl. 1 in. long, white, with a purple lip. Mysore.

Cirrhopetalum nodosum. (*K. B.* 1895, 35.) S. Allied to *C. Macræi*. Rhizomes stout and woody; pseudobulbs distant, ovoid, monophyllous, 2 in. long; l. 6 in. long; scape 3 in. long; fl. 1¼ in. long, reddish, speckled with brown. Nilghiri Hills.

Cirrhopetalum ornatissimum. (*G. C.* 1882, xviii. 424; *B. M.* t. 7229.) S. Fl. straw-coloured, marked with longitudinal purple lines; the pet. and odd sep. with numerous tremulous lamellæ. East Indies.

Cirrhopetalum picturatum. (*B. M.* t. 6802.) S. Pseudobulbs having three or four acutish angles, and a solitary, broadly linear-oblong obtuse emarginate l.; scape from the base of the bulbs with an umbel of about 10 fl., each about 2 in. long: dorsal sep. hooded, with a terminal filiform tail, green, marked with blood-red spots and stripes; lateral sep. conniving in a long straight acuminate blade, pale dirty green, each gibbous near the base; pet. very small, ovate, with horned tips. Moulmein.

Cirrhopetalum pulchrum. (*Ill. H.* 1886, t. 608: *L.* iv. t. 165.) S. A large-flowered species, with short distant 4-angled pseudobulbs, stalked oblong obtuse emarginate l.; and scapes 4–5 in. long, bearing about 7 fl. in an umbel. Dorsal sep. roundish, abruptly running out into a hair-like point ½ in. long, purplish, dotted with darker spots; lateral sep. connate into a convex oblong blade 1¼ in. long, yellow, mottled with purple. Almahera, Moluccas.

Cirrhopetalum robustum. (*O. R.* i. 175: *G. C.* 1895, xvii. 771, f. 116.) S. A species with large ovate angled pseudobulbs and thick leathery l. 13 in. long and 4 in. wide. Scape very stout, bearing an eleven-flowered umbel 7½ in. across; fl. 2¼ in. long: sep. and pet. greenish-yellow tinged with purple; lip deep red purple. New Guinea.

Cirrhopetalum rothschildianum. (*G. C.* 1895, xviii. 608, f. 102.) S. Allied to *C. Collettii*, with bright crimson-purple fl., blotched with yellow on the sep. Darjeeling, India.

Cirrhopetalum setiferum. (*K. B.* 1895, 35.) S. Allied to *C. picturatum*. Pseudobulbs ovoid, 1 in. long; l. narrow, 10 in. long: scape 10 in. long: fl. umbellate, 2 in. long: sep. and pet. setiferous. Himalaya.

Cirrhopetalum stragularium. (*G. C.* 1887, ii. 186.) S. Allied to *C. Thouarsii*, with the upper sep. elliptic, cucullate, with a short apical bristle, purple at the apex and dotted with purple: lateral sep. connate, pale yellow blotched and dotted with purple: pet. bristly on the border, and warted towards the apex, yellowish, spotted with purple, and having brownish purple tips; lip curved, with two diverging angles near the base, convolute, covered with purple-black spots. [Syn. *Bulbophyllum stragularium*, Reichb. f.]

Cirrhopetalum trigonopus. (*G. C.* 1881, xvi. 71.) S. Sharply 3-angled pseudobulbs, cuneate oblong-ligulate l. and umbellate lilac fl. with dark mauve-coloured warted lip. Lateral sep. free; upper sep. acuminate, fornicate, fringed, as are also the falcate subulate petals.

Cirrhopetalum tripudians. (*G. C.* 1876, v. 816.) S. Minute depressed conical pseudobulbs, bearing 2 narrow pale-green l., about 2 in. long. Fl. in a nodding raceme: sep. light brown, minutely hairy; pet. whitish, with purplish spots, hairy and fimbriate; lip fleshy, with purplish spots and many broad dark purplish hairs. Burma.

Cirrhopetalum wendlandianum. (*G. C.* 1891, ix. 612; *Gfl.* 1891, 360.) S. Like *C. Gallettii*. Umbel of wine-purple fl.; the sep. ciliate with a few trembling clavate hairs, and having tails 6–7 in. long. Burma.

Cirrhopetalum whiteanum. (*K. B.* 1895, 7.) S. Allied to *C. vaginatum*, but smaller and the pseudobulbs more crowded; fl. small and yellow. Moluccas!

Cirsium Velenovskyi. (*W. G.* 1896, 76, ff. 6, 7.) Compositæ. H. A biennial. During first year, l. extremely like those of *Chamæpeuce diacantha*. The second year the flowering stems develop to a height of 4½ ft. and bear numerous large red fl.-heads. Servia.

Cissus mexicana. (*B. T. O.* 1888, 298, f. 25.) Ampelidaceæ. H. H. or G. A species of vine, with tuberous root-stock and foliage similar to the ordinary grape vine. Mexico.

Cissus porphyrophyllus. (*R. H.* 1883, 561, f. 110.) S. The plant grown and noted under this name as above quoted is *Piper porphyrophyllum*, N. E. Br.

Citrus Daidai. (*H. G.* 1889, 419.) Rutaceæ. S. shr. A var. of the Mandarin Orange.

Citrus medica Riversii. (*B. M.* t. 6807.) S. A var. of Lemon, with elliptic serrate l. on short wingless petioles, small white fl. and small globose fr. The Bijou Lemon.

Citrus trifoliata. (*B. M.* t. 6513.) H. Shr., having the branches armed with stout thorns. L. trifoliate: leaflets elliptic-lanceolate, crenulate. Fl. nearly sessile in the axils of the thorns, 1½ in. in diam., white, sweet-scented. [*Ægle sepiaria, DC.*] Japan.

Cladrastis tinctoria, foliis variegatis. (*R. H.* 1893, 391.) Leguminosæ. A form of the yellow-wood with variegated l.; variegation said to be constant.

Clarkia pulchella bicolor. (*Gfl.* t. 1042, f. 1.) Onagraceæ. H. H. A form with rosy fl., very broadly bordered with white.

Clausenia corymbiflora. (*Lind. Cat.* 1878, 3.) Rutaceæ. G. shr. of large size, with bright green shining l., large corymbs of white fl., and yellowish-white fr., about the size of a cherry, odoriferous, and of agreeable taste. Loyalty Islands.

Clavija cauliflora. (*Regel, Descr.* 11.) Myrsinaceæ. S. tree. This is *Theophrasta antioquensis* referred to its proper genus. Antioquia, Colombia.

Clavija Ernstii. (*B. M.* t. 6928.) S. shr., growing to 4–5 ft. high, but flowering when much smaller. Stem very robust. L. clustered at the ends of the branches, petiolate, 12–16 in. long, 4–6 in. broad, leathery, oblong or elliptic-oblong, acutish, dark green above, yellow-green beneath. Racemes numerous, axillary, many-flowered, drooping. Fl. ½ in. in diam., apricot-yellow. Caracas, Venezuela.

Cleisostoma ringens. (*G. C.* 1888, iv. 724.) Orchidaceæ. S. A small species, with oblong emarginate l., 3–4 in. long, 1½ in. broad, and a few-flowered raceme of ochreous fl., having the middle lobe of the lip purple, and an orange spot on the side lobes. Sep. oblong, bluntly pointed: pet. narrower. Middle lobe of lip oblong, faintly warted, and with a large tubercle under the column; spur very large, broad, cylindrical, emarginate at the apex. Philippines.

Clematis Addisonii. (*G. and F.* 1896, 324, f. 43.) Ranunculaceæ. H. A near ally of *C. Viorna*; sep. dark violet-purple, except at the acute reflexed yellow tips. Alleghany Mountains, U.S.A.

Clematis coccinea. (*Fl. and P.* 1880, 115, f.) H. This is the scarlet-flowered *Clematis* that is often cultivated as *C. Pitcheri*; this latter is a very different plant with dull purple flowers.

—— Vars. **luteola, parviflora.** (*R. H.* 1888, 348, t.) H. The former has the fl. yellow inside, the latter has smaller fl., reddish inside. Garden varieties.

Clematis Colensoi. (*W. G.* 1889, 80.) G. Similar to *C. indivisa*, with large yellow fl. New Zealand.

Clematis Douglasii. (*W. G.* 1889, 80.) H. A dwarf species, with large, blue bell-shaped fl. North America.

Clematis grewiæflora. (*B. M.* t. 6369.) G. Clothed with a tawny pubescence. L. pinnate: leaflets 3-5, broadly ovate, acute, toothed, 2–3 in. long. Panicles axillary, broadly pyramidal, 4–8 in. long. Fl. campanulate, nearly 1 in. long and rather more in diam., tawny yellow. Himalaya.

Clematis intricata. (*W. G.* 1889, 81.) No description given. Said to have been distributed from the St. Petersburg Botanic Garden. Mongolia.

Clematis lanuginosa violacea. (*F. M.* t. 217.) H. A violet purple fl., 7 in. or more in diam.

Clematis æthusæfolia latisecta. (*B. M.* t. 6542.) H. A var. with broader segments to the l. than the type. Fl. bell-shaped, white. Amurland.

Clematis Pieroti. (*G. and F.* 1888, 357.) H. Resembling *C. virginiana*. L. pinnate, with the leaflets deeply and sharply serrate, having prominent veins, and covered with appressed hairs. Fl. small white. [*C. brevicaudata, DC.*] Japan.

Clematis Pitcheri. (*R. H.* 1878, 10.) H. L. simple, elliptic, obtuse, entire or slightly trilobate. Fl on long pedicels, urceolate, about 1 in. long, scarlet. [*C. coccinea*, Engelm. var.] North-west America.

Clematis Pitcheri × coccinea. (*R. H.* 1893, 376.) H. A garden hybrid intermediate in character between the two parents.

Clematis reticulata. (*B. M.* t. 6574.) H. L. pinnate, or those on the flower stems simple: leaflets stalked, elliptic-ovate, acute, leathery, reticulate with prominent veins. Fl. solitary, pedunculate, ovoid-campanulate; the tips of the sep. recurved, dull greenish outside, purplish within: the sep. are very thick and fleshy. Southern United States.

Clematis rhodochlora. (*R. H.* 1887, 449.) H. Garden variety.

Clematis Sargenti. (*G. and F.* 1888, 344.) H. A small-flowered form of *C. Pitcheri*. North America.

Clematis Stanleyi. (*G. C.* 1890, viii. 326, f. 66; *W. G.* 1890, 453; *G. and F.* iii. 513, f. 65.) G. shr., 3 ft. high with bipinnate silvery foliage and axillary fl.; these are cup-shaped, 2½ in. across, fleshy, and coloured rosy-white to purple. South Africa.

Clematis stans. (*B. M.* t. 6810.) H. per. with erect stems, trifoliolate coarsely-toothed l., and axillary clusters of tubular pale blue fl. ½ in. long. Japan.

Clematis Suksdorfii. (*G and F.* 1896, 255, f. 36.) H. This little-known *Clematis* of the *Flammula* section resembles in habit and foliage the widely distributed and variable *C. ligusticifolia*. North-west United States.

Clematis tubulosa Hookeri. (*B. M.* t. 6801.) H. shr., with large pinnately-trifoliolate l.; leaflets elliptic, acute, dentate; fl. in axillary clusters, pedicellate, tubular, lilac, ¾ in. long. [*C. heracleæfolia, DC.*] North China.

Clematis Viticella magnifica. (*R. H.* 1875, 110.) A var. with purple fl. about 4½ in. in diameter.

Clerodendron cephalanthum. (*G. C.* 1888, iii. 652.) Verbenaceæ. S. climber with brown stems, large ovate dark green l., the petioles of which harden and form stout hooks, and dense terminal heads of creamy-white fl. Calyx large, 5-lobed, purplish. Corolla with a narrow tube, 3–4 in. long, with spreading segments. Stamens much exserted. Zanzibar.

Clerodendron delectum. (*Bull Cat.* 1885, 13.) S. Climber raised from *C. balfourianum*, producing large dichotomous cymes of showy fl.; the calyx is pure white, and the corolla rich magenta rose.

Clerodendron illustre. (*G. C.* 1884, xxii. 424.) S. Shr., resembling *C. squamatum*, but differing in its glabrous and distinctly repand-toothed l. Panicles terminal, with red branches and bright scarlet fl. Celebes.

Clerodendron macrosiphon. (*B. M.* t. 6695: *Fl. and P.* 1883, 107.) S. Shr., with opposite oblanceolate pinnatifid l., and terminal subsessile cymes of very long-tubed pure white fl., with long exserted purple stamens. Zanzibar.

Clerodendron Minahassæ. (*Bull Cat.* 1886, 7.) S. Shr., with square stems, opposite obovate serrate l. and broad terminal cymose panicles of yellowish-white fl. 4 in. long, with exserted purple anthers. In fruit the calyx grows out so as to resemble a fl. 3 in. across, of a red colour, with a round blue berry in the centre. Celebes.

Clerodendron paniculatum. (*Gard.* 1889, xxxvi. 286.) S. Shr., with 4-angled stems, cordate l., and terminal loose heads of bright crimson fl. Old World Tropics.

Clerodendron rumphianum. (*Bull Cat.* 1887, 9.) S. Shr., with large roundish-ovate dark green l., and terminal panicles of long-tubed fl., which at first are flesh-coloured, deepening to red and crimson: stamens exserted, red. Java.

Clerodendron trichotomum. (*B. M.* t. 6561.) H. Shr., 6–10 ft. high. L. opposite: the lower very large and trifid, the upper broadly ovate, acuminate, entire or serrate. Cymes axillary and terminal, long pedunculate, trichotomously branched, red. Calyx red. Corolla white, ¾ in. in diameter. Japan.

Clethra arborea, foliis variegatis. (*R. H. B.* 1893, 285, t.) Ericaceæ. G. A form with variegated leaves. Madeira.

Cleyera japonica tricolor. (*Bull Cat.* 1882, 14.) Ternstrœmiaceæ. G. Shr. The dark green l. marked with longitudinal and oblique bands of greyish-green, and the margins creamy-white tinged with rose. Japan.

Clianthus Dampieri germanicus. (*H. G.* 1889, 481.) G. Leguminosæ. Garden var.: no description given.

Clidemia vittata. (*Ill. H.* 1875, t. 219: *Lind. Cat.* 1876, 4, t.) Melastomaceæ. S. Shr. of quick growth. L. large elliptic, acute, 5-nerved, bullate, rich metallic green, with a central white stripe. Fl. pale rose, in a short erect dense panicle. Peru.

Clintonia andrewsiana. (*G. C.* 1888, iii. 805; *B. M.* t. 7092.) Liliaceæ. H. per. with approximate sessile broadly ovate glabrous l., resembling those of a *Colchicum*, and an erect scape about 2 ft. high, bearing an umbel of campanulate deep rose-coloured fl., on slender pedicels. California.

Cliveucharis pulchra. (*G. C.* 1891, ix. 708; *W. G.* 1891, 274; *Gfl.* 1891, 416.) Amaryllidaceæ. S. A supposed bigeneric hybrid between a *Clivia* and *Eucharis grandiflora*.

Clivia miniata Lindeni. (*Ill. H.* 1879, t. 343.) S. A fine robust var., with fl. larger and more numerous than in the type.

Clivia sulphurea. (*W. G.* 1888, 275.) S. A garden form of *C. miniata*.

Cnicus altissimus. (*G. C.* 1879, xi. 436, f. 61; *Gfl.* 1879, 88.) Compositæ. H. A bold herb. plant, forming a cone 10–11 ft. high and 6–7 ft. through, with large thistle-like pinnatifid l. and numerous fl.-heads, in clusters of about three at the ends of the branches. North America.

Coccinia Moghadd. (*B. T. O.* 1894, 115, f. 31.) Cucurbitaceæ. S. A tall-growing per. gourd with palmately-lobed l., whitish yellow fl., and carmine red ovoid fr. Abyssinia.

Cocculus carolinianus. (*Gfl.* 1886, 404.) Menispermaceæ. H. climber. L. very variable, roundish, broadly ovate, or with 2–4 short obtuse basal lobes, middle lobe longer, obtuse, rarely acute. Fl. dioecious, in raceme-like axillary panicles, white, the female fl. succeeded by bright scarlet berries. [*C. carolinus*, DC.] North America.

Cochlioda nœzliana. (*L.* vi. t. 266; *O.* 1891, 290; *B. M.* t. 7474.) Orchidaceæ. G. Very similar to *C. vulcanicum*, but with rather broader pet. [Syn. *Odontoglossum nœzlianum*, Hort.] Andes.

—— Var. **aurantiaca.** (*G. C.* 1895, xvii. 763.) G. A form with yellower fl. than the type.

Cocos Datil. (*B. T. O.* 1889, 211.) Palmæ. S. Growing to 30 ft. high, with l. 10–13 ft. long. Argentine.

Cocos odorata. (*R. H.* 1893, 345, f. 110.) Palmæ. S. A dwarf species like *C. campestris*, but differing in its depressed sub-spherical apiculate fruit.

Cocos petræa. (*B. T. O.* 1889, 211.) S. 3–4 ft. high, with l. not more than 2½ ft. long. Andes of Bolivia.

Cocos Pynærtii. (*G. C.* 1891, xi. 683 ; *G. and F.* iv. 293.) Palmæ. S. A seedling form of *C. weddeliana* differing only from the type in having narrower pinnæ. Figured as *C. sp.? minima glauca* in *R. H. B.* 1891, xvii. 91, f. 15.

Codiæum. Nurserymen have introduced a large number of species, or varieties of a few species, of the genus *Codiæum* and distributed them as Crotons, but the two genera are widely distinct, and belong to two different groups of the order *Euphorbiaceæ*. See under *Croton*.

Cœlia bella. (*B. M.* t. 6628.) Orchidaceæ. G. The correct name for the plant known as *Bothriochilus bellus*.

Cœlogyne arthuriana. (*G. C.* 1881, xv. 40 ; *Veitch Cat.* 1881, 17.) Orchidaceæ. S. In fl. much like *C. maculata*, but with one or two long conspicuous lines on the pet., a deep purple-mauve border to the front lobe of the lip, with an inconspicuous bract, and a peculiar pseudobulb, approaching that of *C. lagenaria* in its abrupt upper part, but with five strong blunt angles, deep purple with numerous small light green spots. Burma.

Cœlogyne balfouriana. (*Sand. Cat.* 1896, 6.) S. Fl. cinnamon, orange, and white, in long arched spikes.

Cœlogyne barbata. (*G. C.* 1880, xiii. 8 ; *W. O. A.* t. 143.) S. Fl. large, white. The lip brown, trifid, with projecting lobes. three rows of lamellæ on the disk and a ciliate border. Bhotan.

Cœlogyne birmanica. (*G. C.* 1882, xviii. 840.) S. Very near and probably only a var. of *C. præcox*, with bluish-purple pseudobulbs, a shortly-toothed front border to the lip, and a nearly entire border round the anther. Along the crests are several brown spots on a white ground. Burma.

Cœlogyne borneensis. (*K. B.* 1893, 62.) S. Allied to *C. longifolia* ; pseudobulbs ovoid, each bearing two obovate l. ; raceme 5 in. long ; fl. small, whitish with red brown markings on the lip. Borneo.

Cœlogyne brachyptera. (*G. C.* 1881, xvi. 6.) S. Epiphyte, with thin four-angled pseudobulbs. 8–9 in. high, and a lax raceme of fl. something like those of *C. lentiginosa*. Sep. and pet. light green : lip white with a brown stain. Burma.

Cœlogyne carinata. (*K. B.* 1895, 191.) S. Pseudobulbs four-angled, 2 in. long, two-leaved ; l. oblong lanceolate 5 in. long ; scape 4–8 in. long, six-flowered ; sep. and pet. 1 in. long, whitish-green : lip three-lobed, spotted with brown. New Guinea.

Cœlogyne chloroptera. (*G. C.* 1883, xix. 666.) S. Pseudobulbs pyriform, with two thick plaited cuneate-oblong acute l., and a 5–6-flowered raceme of green fl. ; lip whitish, with brown nerves, and a brownish area in front of the keels. Philippines.

Cœlogyne Clarkii. (*G. C.* 1893, xiii. 741.) S. Like *C. anceps*. It has light brown sep. and pet. and a yellowish brown lip margined with brown.

Cœlogyne corymbosa. (*G. C.* 1876, vi. 8 ; *B. M.* t. 6955.) S. Pseudobulbs distichous. L. firm, petiolate, oblong, acute, nerves prominent beneath. Peduncles bearing 2–4 cream-coloured fl. Lip trifid, with two keels reaching to base of middle lobe ; side lobes with brown nerves, and each with a large orange spot. Himalaya.

—— Var. **heteroglossa.** (*G. C.* 1878, x. 8.) S. A large-flowered var. with the apices of the side lobes of the lip overlapping the base of the very broad middle lobe, and with three membranous keels along the middle of the lip.

Cœlogyne cristata alba. (*Bull Cat.* 1881, 16.) S. A var. with entirely white flowers.

—— Var. **hololeuca.** (*G. C.* 1881, xv. 563.) S. A var. with the crests of the lip white.

—— Var. **maxima.** (*G. C.* 1886, xxv. 398 ; *R.* ser. 1, t. 6.) S. Fl. large, with unusually broad sep. and pet., and shallow side lobes to the lip.

Cœlogyne cuprea. (*G. C.* 1892, xi. 619.) S. Long onion-shaped pseudobulbs. oblong l., and fl.-stalks bearing five to eight bracts and drooping fl., which somewhat resemble a reduced fl. of *C. speciosa*.

Cœlogyne dayana. (*G. C.* 1884, xxi. 826 : *W. O. A.* t. 247.) S. Long narrow fusiform pseudobulbs, bearing stalked oblong acuminate l., and a long lax many-flowered infl. of light ochreous fl. : sep. and pet. ligulate. acute ; lip broad, three-lobed, side lobes wavy, middle lobe reniform, crenulate ; two keels run from the base of the lip to the base of the middle lobe, where they divide into six : the lip is marked with dark brown stripes on the lateral lobes and a dark brown crescent on the base of the middle lobe. Borneo.

Cœlogyne Fœrstermanni. (*G. C.* 1886, xxvi. 262.) S. Rhizome stout ; pseudobulbs thick. curved. ribbed, cylindric, two-leaved : peduncles 2 ft. long. bearing twenty or more white fl. marked with yellowish-brown on the lip. Sep. and pet. oblong, acute. Lip trifid. side lobes half rounded. mid-lobe elliptic, acute, with plicate keels. Sunda Islands.

Cœlogyne glandulosa. (*Fl. and P.* 1882, 52.) S. A form with ovate sulcate pseudobulbs, oblong - lanceolate l., and a nodding raceme of pure white fl., 1½ in. in diam. ; the front lobe of the lip marked with yellow lines. Nilghiri Mountains.

Cœlogyne graminifolia. (*G. C.* 1888, iii. 168 ; iv. 15 ; *B. M.* t. 7006.) S. L. 12–18 in. long, linear, leathery. Peduncles 4–5 in. long, 2–4-flowered. Sep. and pet. lanceolate. acute, white. Lip three-lobed. side lobes white veined with brown, front lobe yellow tipped with white, the disk with three crisped keels, ending in brown lines. Burma.

Cœlogyne hookeriana. (*B. M.* t. 6388.) S. Small ovoid smooth pseudobulbs bearing a solitary elliptic-lanceolate plaited l. 1–2 in. long, and a solitary fl. with lanceolate acuminate bright rose-purple sep. and pet. and a white lip blotched with pale brown in front, and having seven slender crested yellow lamellæ on the disk. Sikkim Himalaya.

— Var. **brachyglossa.** (*G. C.* 1887, i. 833.) S. A var. with pale rose sep. and pet., and a more open white lip ; sep. having the disk light yellow spotted with reddish-brown. Himalaya.

Cœlogyne humilis albata. (*G. C.* 1888, iii. 392.) S. A var. with white fl., having two orange spots and some radiating dotted lines on the lip.

Cœlogyne humilis tricolor. (*G. C.* 1880, xiii. 394.) S. Differs from the other varieties of this species in having brown marbling on the lip.

— Var. **tricolor.** (*W. O. A.* t. 102.) S. With pale lilac-tinted sep. and pet., and a large light yellow lip spotted with dull brownish-orange. Himalaya.

Cœlogyne lactea. (*G. C.* 1888, iii. 521 : *W. O. A.* t. 459.) S. Much in the way of *C. flaccida*. Pseudobulbs short. tumid. wrinkled. and ribbed. shining. L. cuneate - oblong, acute. thick. 7 -8 in. long, 1–2 in. wide. Fl. like those of *C. flaccida*, creamy-white. with an ochreous lip marked with brown veins on the side lobes and some bright yellow at the base of the front lobe. Burma.

Cœlogyne lamellata. (*K. B.* 1895. 36.) S. A species allied to *C. Macdonaldi* ; scape erect, three-flowered ; fl. whitish-green ; sep. and pet. oblong - lanceolate, keeled, 1½ in. long ; lip three-lobed, corrugated. New Hebrides.

Cœlogyne lauterbachiana. (*N. B.* 1896, 113.) S. Allied to *C. carnea*, but differing in having more than one l. to a pseudobulb, in the form of the lip and in the shorter infl. New Guinea.

Cœlogyne lurida. (*L.* xii. t. 532.) S. Sep. and pet. a rather greenish-yellow tinged with purple ; lip 3-lobed, white and purplish.

Cœlogyne maculata virginea. (*G. C.* 1887, ii. 682.) S. A var. with pale green pseudobulbs, and the lip tinted with light sulphur, without spots.

Cœlogyne mayeriana. (*G. C.* 1877. viii. 134.) S. In the way of *C. panduratа*, but about half its size. The colours are the same, but the lip has a longer base, a broader front part, and scarcely any neck in the middle.

Cœlogyne massangeana. (*G. C.* 1891. x. 684 ; *B. M.* t. 6979.) S. Allied to *C. asperata* (*C. Lowii*), but with a longer laxer raceme and a different lip. Sep. oblong. light ochre, keeled outside ; pet. nearly as broad. Lip trifid, maroon brown with ochre veins ; front lobe whitish with a large brown disk ; keels light yellow.

Cœlogyne micholitziana. (*G. C.* 1891, x. 300; *Gfl.* 1891, 534.) S. Allied to *C. speciosa*; fl. white with a brown callus. Macassar.

Cœlogyne Micholitzii. (*G. and F.* 1895, 144.) S. In habit it resembles *C. barbata*, having scapes 2 ft. high, bearing large pure white flowers.

Cœlogyne Mossiæ. (*K. B.* 1894. 156: *G. C.* 1894, xv. 400, f. 49.) S. Allied to *C. nervosa*. Pseudobulbs 1½ in. long ovate, diphyllous; l. 6 in. long: raceme 6 in. long, bearing about 6 fl. each 1½ in. across, pure white with a yellow crescent-shaped mark on the lip. Nilghiri Mts.

Cœlogyne ocellata boddartiana. (*G. C.* 1882, xviii. 776.) S. This differs from the type in the deep colour of the lip being absent.

—— Var. **maxima.** (*G. C.* 1879, xi. 524; *F. M.* t. 365.) S. A strong-growing var. with a rich raceme; colour as in type, with the lateral yellow blotches spread widely apart; the front central one confluent, and overrun by the side keels.

Cœlogyne Peltastes. (*G. C.* 1880, xiv. 296; *L.* vi. t. 258.) S. Large thin oblong pseudobulb. which forms a kind of convex shield over the climbing stem. Fl. emerald green, the lip white marked with brown. Borneo.

Cœlogyne præcox tenera. (*G. C.* 1883, xx. 294.) S. A var. with pale lilac and yellow fl., having a few purple-mauve blotches on the lip.

Cœlogyne rossiana. (*G. C.* 1884, xxii. 808; *B. M.* t. 7176.) S. Pseudobulbs obpyriform, ribbed; l. two, long-petioled, oblong-lanceolate, acute, 1 ft. long. 1½ in. broad. Peduncle short, few-flowered. Fl. white, with yellowish side-lobes to the lip. Sep. and pet. ligulate-acute. Burma.

Cœlogyne salmonicolor. (*G. C.* 1883, xx. 328.) S. Allied to *C. speciosa*, but smaller, with tetragonous pear-shaped pseudobulbs, solitary cuneate-oblong acuminate undulate l., green at the base, coppery elsewhere, and solitary salmon-coloured fl., the 3-lobed lip being somewhat tesselated with brown. Java or Sumatra.

Cœlogyne Sanderæ. (*G. C.* 1893, xiii. 336, 360, f. 52; *R.* t. 56.) S. Allied to *C. barbata*. It has ovate pseudobulbs, ovate-lanceolate l., and erect scapes bearing fl. 2 in. across, white with a yellow blotch on the lip and a fringe of long brown hairs on the keel. Upper Burma.

Cœlogyne sanderiana. (*G. C.* 1887, i. 764.) S. Fl. white, the front lobe of the lip being yellow and the side lobes marked with 3 brown stripes. Pseudobulbs over 2 in. long. L. 1 ft. long, 2½ in. wide; petiole dilated at base. Raceme 5 6-flowered. Fl. as large as those of *C. speciosa*. Sunda Isles.

Cœlogyne sparsa. (*G. C.* 1883, xix. 306: *Gfl.* t. 1442.) S. Allied to *C. lentiginosa*, with glaucous fusiform pseudobulbs, cuneate-oblong acute glaucous l., 3–4 in. long, 1 in. broad. Peduncle 1–4-flowered; fl. white; lip 3-lobed, with a brown spot in front of the keels, some smaller ones on the side lobes, and a yellow spot at the base. Philippines.

Cœlogyne stellaris. (*G. C.* 1886, xxv. 8.) S. Something in the way of *C. testacea*, with tetragonous pseudobulbs, and oblong acute l.: fl. green with a white lip, having brown lines on the side lobes. Borneo.

Cœlogyne swaniana. (*K. B.* 1894, 182: *G. C.* 1894, xv. 539; *B.* ser. 2. t. 92.) S. Allied to *C. dayana* but with shorter pseudobulbs, l., and racemes. The fl. are white with a brown lip veined with yellow. Philippines.

Cœlogyne tenuis. (*K. B.* 1893, 171.) S. Near *C. borneensis*, differing in its 1-leaved pseudobulbs, slender scapes, and other characters. Fl. small, of a light buff colour. Borneo.

Cœlogyne Veitchii. (*K. B.* 1895, 282; *Gfl.* 1897, 586, f.) S. Pseudobulbs fusiform, 4 in. long; l. lanceolate 6 in. long: racemes drooping, 2 ft. long bearing numerous pure white fl. 1 in. across. New Guinea.

Cœlogyne virginalis. (*G. and F.* 1896, 144.) S. Fl. pure white, in the way of *C. cristata* and deliciously fragrant.

Coffea stenophylla. (*B. M.* t. 7475.) Rubiaceæ. S. One of the two indigenous West African species, and of commercial value. Sierra Leone.

Coffea travancorensis. (*B. M.* t. 6749.) S. L. shortly-stalked, broadly ovate, acute, bright green; fl. axillary, white, ¾ in. in diam, sweetly scented. South India.

Colax jugosus punctatus. (*G. C.* 1883, xix. 688.) Orchidaceæ. S. A var. with greenish-yellow fl. spotted with dark red. [*Lycaste jugosa*, Nichols. var.]

—— Var. **rufinus.** (*G. C.* 1883, xix. 784.) S. This form has brown instead of blue-mauve on the lip, pale yellowish-green sep., and blackish-purple specks on the pet. [*Lycaste jugosa*, Nichols. var.]

Colax Puydtii. (*Ill. H.* 1880, t. 369.) S. Perhaps a var. of *C. jugosus*, the l. and pseudobulbs being the same. The fl. are green with a few dark purple-brown spots on the central part of the sep., and numerous confluent ones on the pet.: the lip is livid violet. Brazil.

Colchicum Bornmuelleri. (*G. C.* 1892, xii. 471.) Liliaceæ. H. Resembling *C. speciosum*, of which it may be a mere geographical form. Orient.

Colchicum byzantinum cilicum. (*Gfl.* 1896, 172.) H. A handsome var. with fl. as large as those of *C. speciosum*. Asia Minor.

Colchicum crociflorum. (*Gfl.* t. 1035. ff. 1, 2; *G. C.* 1883, xix. 372, f. 55.) H. L. linear, obtuse, contemporary with the fl. Tube of the fl. 3–4 in. long, purple; perianth segments oblong-lanceolate, obtuse, white, with 3–4 dark purple stripes on the back of each. Turkestan.

Colchicum Decaisnei. (*B. T. O.* 1892. 132; *G. C.* 1892, xii. 458.) H. Allied to *C. lætum*, with large rosy-purple fl. Lebanon.

Colchicum fasciculare. (*Gard.* 1896, xlix. 89.) H. The foliage and fl. of this species appear together, the latter being Crocus-like in shape and pink and white in colour. Greece.

Colchicum montanum. (*B. M.* t. 6443: *Fl. and P.* 1882, 26; *G. C.* 1882, xvii. 56, 77.) H. L. resembling those of *Scilla bifolia*; fl. Crocus-like with a long slender tube and incurved oblong segments, pale lilac, deeper in colour at the base. Smyrna.

Colchicum procurrens. (*G. C.* 1890, vii. 192; *Gfl.* 1890, 255.) H. One of the *Blastodes* section and closely allied to *C. Bolssieri*. Fl. bright lilac. L. linear. Rhizome resembling that of a *Merendera*. [Syn. *Merendera sobolifera*, Hort.] Smyrna.

Colchicum Sibthorpii. (*G. C.* 1890. viii. 388: *B. M.* t. 7181.) H. Fl. as large as those of *C. speciosum*, 3–4 in a spathe, tessellated with lilac-purple; l. broadly strap-shaped. [Syn. *C. latifolium*, Sibth. & Sm.] Armenia.

Colchicum Troodii. (*B. M.* t. 6901; *R. H.* 1887, 166.) H. Depressed-globose corm, producing numerous white fl. 1½ in. in diam., with narrow oblong segments. L. 6–12 in. long, ⅔–1 in. broad, strap-shaped, obtuse, dark green. Cyprus.

Colensoa physaloides. (*B. M.* t. 6864.) Campanulaceæ. G. or H. H. bushy herb. 2–3 ft. high. L. petiolate, elliptic-ovate, acute, serrate, 4–6 in. long. Racemes lax, few-flowered. Fl. 1½ in. long, very pale blue, 2-lipped, the upper lip divided into two linear lobes. Fruit inflated, berry-like, violet, crowned by the linear green calyx teeth. New Zealand.

Coleus Penzigii. (*Gfl.* 1892, 525.) Labiatæ. G. A bushy species with large emerald-green thick fleshy l., and long spikes of blue fl. Abyssinia.

Coleus pictus. (*Bull Cat.* 1877, 3, t. 5.) G. foliage plant, with lanceolate acute coarsely and irregularly toothed l., green, variegated with yellow and chocolate-brown. Duke of York's Island, near New Guinea.

Coleus spicatus Rondinella. (*Gfl.* 1896, 358, f. 62.) G. A bushy herb. plant about 8 in. high, with fleshy l. and racemes of blue fl. Abyssinia.

Collabium simplex. (*G. C.* 1881. xv. 452.) Orchidaceæ. S. Pseudobulbs short, terete, dull purple: l. oblong, acute, wavy, light-green, blotched with dark green: fl. in a raceme, greenish-yellow blotched with brown outside, and with purple inside; lip white. Borneo.

Colocasia devansayana. (*Ill. H.* 1886, t. 601.) Araceæ. S. Petioles purple-brown; l. erect, cordate-sagittate, acute, of a bright dark green

colour, paler beneath, with purple-brown midrib, and primary veins. New Guinea.

Colocasia neoguineensis. (*Ill. H.* 1880, t. 380.) S. per. with cordate acuminate l. of a deep green, handsomely blotched with white. New Guinea.

Columnea Kalbreyeri. (*B. M.* t. 6633: *G. C.* 1882. xvii. 44. 216, 217. f. 32: *Fl. and P.* 1882, 26.) Gesneraceæ. S. per. A striking plant, with thick stems and crowded opposite sessile l., one of each pair being very small, the other being 1 ft. or more long, and 2½–3 in. broad, lanceolate, acuminate, toothed, bright green with yellowish-green patches above, crimson beneath. Fl. in axillary leafy fascicles, large, yellow streaked with red. Antioquia, Colombia.

Colutea longialata. (*M. D. G.* 1896, 49.) Leguminosæ. H. Nearly related to *C. arborescens*. Probably a native of the Balkan Peninsula or Asia Minor.

Colutea melanocalyx. (*G. C.* 1892, xii. 669.) H. A near ally of *C. arborescens*, principally differing in the calyx and pedicels being clothed with short dark-coloured hairs. Asia Minor.

Comanthosphace japonica. (*B. M.* t. 7463.) Labiatæ. H. A small undershrub with hoary branches, ovate-lanceolate dark green l. and erect terminal spikes of small yellow fl. with long exserted stamens. Japan.

Comparettia macroplectron. (*G. C.* 1879, xi. 398; *B. M.* t. 6679.) Orchidaceæ. S. Fl. large, whitish washed with rose-red, and having the broad acute pet. and square blade of the lip covered with numerous rose-red spots; sides of the lip denticulate. Colombia.

Comparettia speciosa. (*G. C.* 1878, x. 524; *W. O. A.* t. 233.) S. Fl. large: pet. and column light ochre: blade of lip ¾ in. high, 1½ in. broad, rich orange; spur 1½ in. long. Ecuador.

Conandron ramondioides. (*G. C.* 1879, xii. 232; *B. M.* t. 6484.) Gesneraceæ. H. or H. H. herb., with the habit and l. of *Ramondia pyrenaica*. Fl. in a corymbose cyme terminating a leafless scape: corolla rotate, pinkish: stamens 5; the apex of the anthers produced and coherent in a tube embracing the style. Japan.

Conophallus titanum. (*G. C.* 1878, x. 788, 781, f. 127.) Araceæ. S. A plant with a gigantic fl. and l. Tuber 18 in. in diam. L. solitary; petiole 10 ft. high, blade divided into three principal bipinnatisect branches which cover an area 45 ft. in circumference. Scape 18 in. high. Spathe nearly 3 ft. in diam., campanulate, black-purple, with a green base inside. Spadix 5 ft. long, of which the basal 8 in. alone bear fl., the rest being a barren appendix. [*Amorphophallus titanum*, Becc. *B. M.* t. 7153–5.] Western Sumatra.

Convallaria majalis prolificans. (*Gfl.* t. 1292.) Liliaceæ. H. A form with abnormal fl., the perianth being more or less deeply divided and the lobes more or less spreading.

Convolvulus californicus. (*W. G.* 1888, 472.) Convolvulaceæ. H.H. per. twiner, with long-stalked sagittate light green l., and large white fl., with canary yellow throat: peduncles long. California.

Convolvulus chrysorhizus. (*W. G.* 1888, 288.) S. A var. of *Ipomœa Batatas*, Lam.

Convolvulus macrostegius. (*G. C.* 1895, xviii. 405.) H. H. A climbing plant bearing large creamy white fl. San Miguel, California.

Coprosma baueriana picturata. (*Bull Cat.* 1876, 5.) Rubiaceæ. G. Like *C. baueriana variegata*, but with central instead of marginal variegation. [*C. Baueri*, Endl. var.] New Zealand.

—— Var. **variegata.** (*B. H.* 1881, 470.) H. H. shr. of bushy habit, with opposite subsessile oblong shining green l., bordered with white.

Cordia decandra. (*B. M.* t. 6279.) Boraginaceæ. G. shr. Branches scabrid. L. alternate, sessile or sub-sessile, spreading or deflexed, lanceolate, obtuse, scabrid, rugose, and dark green above, pubescent, greyish-green beneath; margins revolute. Infl. terminal, cymose-panicled; peduncles and pedicels tomentose. Calyx campanulate, 10-toothed, scabrous, brown. Corolla 1–1½ in. in diameter, funnel-shaped, pure white; margin with 10 short rounded lobes. Stamens 10, the alternate ones longer, included. Style branches 2, each forked at the apex. Fr. nut-like, woody, 4-celled, separating when ripe into 4 valves. Seeds numerous. Chile.

Cordia Gregii Palmeri. (*G. and F.* 1889, 233, f. 106.) G. Shr. 5 ft. to 10 ft. high, with small pubescent toothed l., and terminal clusters of white fragrant fl., in size and form like those of *C. Sebestena*. North Mexico.

Cordyline indivisa dalliereana. (*Ill. H.* 1890, t. 114.) Liliaceæ. G. Seedling var. having the l. striped with yellow.

—— Var. **doucetiana.** (*Ill. H.* 1880, t. 40; *G. C.* 1888, iii. 563; *G. and F.* 1888, 204.) G. A var. having the l. edged and striped with white.

Cordyline Thomsoni. (*F. M.* t. 141.) G. A var. with broad elliptic acute deep green l., broadly bordered with magenta-rose; the young l. being of much paler green and rosy tints, deepening with age.

Coreopsis abyssinica. (*Gard.* 1895, xlviii. 192.) Compositæ. H. annual, with finely cut l. and rich yellow fl., about 1 in. diameter. Abyssinia.

Coreopsis aristosa. (*B. M.* t. 6462.) H. annual having pinnatisect l., with narrow lanceolate serrate acute segments, and laxly corymbose long-peduncled radiate golden-yellow fl.-heads, 2 in. in diam. United States.

—— Var. **mutica.** (*Gfl.* t. 1393.) H. annual, about 3 ft. high, with cut l. turning bronze, and bright deep yellow fl. heads. United States.

Coreopsis grandiflora. (*Gard.* 1895, xlvii. 7, t. 995.) H. Like *C. lanceolata*, but with larger fl. and pinnate l. Southern United States.

Coreopsis japonica. (*F. G.* 1895, 438, f. 41.) H. L. linear-lanceolate. Heads canary-yellow. Japan.

Coreopsis maritima. (*B. M.* t. 6241.) H. H. perennial herb, of the section *Tuckermannia*, 3–4 ft. high, glabrous. L. bipinnatifid, 4–10 in. long, green; segments lax, linear, acute. Fl.-heads large, 3–4 in. in diam., yellow, on stout peduncles 4–8 in. long. California.

Coreopsis nudata. (*B. M.* t. 6419.) H. herb. per. L. rush-like. Fl. like a *Dahlia*; the heads 2½ in. in diam., rays purple, disk yellow. Southern United States.

Coriaria japonica. (*B. L.* t. 7509.) Coriariaceæ. H. Interesting in the colour of the flowering and fruiting pet., which vary from cherry to coral-red, these in all other known species being black or violet-black. Japan.

Cornus alba Rosenthali. (*M. D. G.* 1897.) Cornaceæ. H. A form with variegation similar to *C. Spaethii*.

Cornus corynostylis. (*Gfl.* 1896, 286.) H. A Himalayan species nearly allied to *C. macrophylla*, Wall.

Cornus florida, flore rubro. (*R. H.* 1889, 154.) H. shr. A var. having the fl. tinted with bright red. North America.

Cornus Kousa. (*G. C.* 1892, xi. 816; *J. of H.* 1892, xxv. 11, f. 2.) H. [*Benthamia japonica*, Sieb. and Zucc.]

Cornus Mas aurea elegantissima. (*R. H.* 1878, 420.) H. L. differently variegated, yellow passing into rosy-violet, some bordered with rose, others with rose and yellow.

—— Var. **Mietzschii.** (*Gfl.* 1894, 556.) H. Garden var., with l. marbled, spotted and striped with grey, white and green.

Cornus sanguinea, foliis aureo-marginatis, grandifolia. (*R. H. B.* 1889, 269.) H. A sport, remarkable on account of its very large golden-variegated leaves.

Cornus sibirica Gouchaulti. (*R. H.* 1888, 519.) H. Garden var., with variegated leaves.

Corokia Cotoneaster. (*G. C.* 1876, v. 654.) Cornaceæ. H. H. bush, with rigid spreading black woody tortuous branches. L. small, orbicular, obcordate, oblong-ovate or obovate, suddenly contracted into a flat linear petiole, shining above, white beneath. Fl. small, yellow, sweet-scented, solitary, axillary. New Zealand.

Coronilla cappadocica. (*Gard.* 1896, I. 111.) Leguminosæ. H. Prostrate. Fl. golden yellow in numerous racemes. Asia Minor.

Cortusa Matthioli grandiflora. (*Gfl.* t. 961, f. 2.) Primulaceæ. H. per herb. Fl. large, deep red, campanulate, crenately-lobed. Thian-Shan Mountains, Central Asia.

Coryanthes Bungerothi. (*L.* vi. t. 244 : *G. C.* 1890, viii. 210 : *Gfl.* 1890, 647.) Orchidaceæ. S. Fl. large. Sep. pale green dotted with red : pet. white with larger red spots. The lip has the front part of the very large hood-like organ prolonged down to the level of the bucket-shaped part, it is of an orange colour, spotted inside with red-brown, the bucket-shaped part is yellow shading to yellowish brown, and marked inside with large red-brown spots. Venezuela.

Coryanthes leucocorys. (*L.* vii. t. 293.) S. The large sep. and pet. are greenish-yellow, marked with brown-purple, the bucket of the lip is dark purple, and the large hood is white. Peru.

Coryanthes macrocorys. (*L.* viii. t. 342.) S. Fl. large, pale yellow, spotted and dotted with purple, and having a very elongate thimble-shaped hood at the base of the lip, streaked with purple. Peru.

Coryanthes maculata vitrina. (*O. R.* 1895, 240.) S. Fl. light greenish-yellow.

Coryanthes Wolfii. (*O. R.* 1893, 264; *G. C.* 1891, x. 483.) S. Stiff upright scapes bearing yellow and brownish red medium-sized fl., remarkable for their nearly flat solid hood. Ecuador.

Corydalis Gortschakowi. (*Gfl.* t. 1183.) Papaveraceæ. H. A glaucous green per. herb, with bipinnatisect l., the radical ones 5–6 in. long ; the flowering stem 1–1½ ft. high, branched. Racemes close, elongated. Fl. golden yellow, ¾ in. long. Turkestan.

Corydalis kolpakowskiana. (*Gfl.* t. 948 ; *B. M.* t. 6925.) H. per. Root-stock tuberous ; l. petiolate, ternately pinnatifid, and racemes lax, bearing rather large purple fl. Turkestan.

Corydalis ledebouriana. (*Gfl.* t. 981 : *B. M.* t. 6946.) H. per., with tuberous rootstock : l. petiolate, biternately cut, with obovate glaucous segments ; fl. sub-sessile ; bracts large ovate or elliptic, glaucous ; fl. purple, the rather thick spur pale purple. Altai.

Corydalis pallida. (*B. M.* t. 6826.) H. A succulent herb, 1–1½ ft. high : l. tripinnatisect, pale green, glaucous beneath ; racemes terminal, many-flowered ; fl. ¾ in. long, bright golden yellow, the tips of the outer segments brownish. China and Japan.

Corydalis Sewerzowi. (*Gfl.* t. 1077 : *R. H.* 1883, 116, f. 23 ; *B. M.* t. 6896.) H. tuberous per. Dwarf species, with fleshy glaucous-green verticillate pinnatisect l., and few-flowered racemes of large yellow fl., with a long hooked spur. West Turkestan.

Corydalis tuberosa alba. (*G. C.* 1888, iii. 556.) H. per. This is the plant cultivated as *C. cava alba*, *C. bulbosa alba*, and *C. marshalliana*. Fl. white. Europe.

Corylopsis himalayana. (*B. M.* t. 6779.) Hamamelidaceæ. H. Shr. or small tree resembling the hazel in appearance, with short pendulous racemes of pale yellowish fl. appearing before the l., which are cordate acute and toothed at the edges. Eastern Himalaya.

Corynocarpus lævigata aureo-marginata. (*Williams' Cat.* 1886, 241, f.) Anacardiaceæ. G. shr. L. large, broadly bordered with golden yellow. New Zealand.

Corypha decora. (*Bull Cat.* 1887, 10.) Palmæ. S. L. fan-shaped, divided almost to the base into linear segments ½ in. broad. Petioles armed with hooked prickles. Queensland.

Cosmibuena obtusifolia latifolia. (*B. M.* t. 6239.) Rubiaceæ. The correct name for *Cascarilla grandifolia*.

Cosmos bipinnatus albiflorus. (*B. T. O.* 1890, 356.) Compositæ. H. annual. A var. with white flowers.

Cosmos hybridus. (*G. and F.* 1888, 474.) H. annual, attaining 6–7 ft. in height, with finely-cut l., and white or pale rosy fl.-heads, about 2½ in. in diam., in large terminal corymbs. Mexico.

Cosmos spectabilis. (*R. H.* 1892, t. 372, f. 114–115.) H. annual. Garden hybrid.

Costus englerianus. (*G. C.* 1892, xii. 789, 696.) Scitamineæ. S. Stems short, decumbent, bearing elliptic obtuse fleshy dark green l. and sessile spikes of small white and yellow fl. [Syn. *C. unifolius*, N. E. Br.] Tropical Africa.

Costus igneus. (*Ill. H.* 1884, t. 511; *B. M.* t. 6821.) S. herb, about 1 ft. high, the stem terminating in a crown of elliptic-obovate acute dark green l., from the axils of which arise the large fiery-orange fl. The limb of the fl. (labellum) is about 2½ in. in diam., flat and irregularly toothed around the margin. Bahia, Brazil.

Costus lucanusianus. (*Gfl.* t. 1379.) S. A tall growing species with lanceolate acuminate l., white beneath, and terminal heads of purple fl. with a yellow middle lobe to the lip. Cameroons.

Costus mosaicus. (*Bull Cat.* 1887, 10.) S. per. with variegated foliage. L. obliquely lanceolate, 3–4 in. long, the centre dark green, the rest tessellated with silvery-grey. Congo.

Cotoneaster sikkimensis. (*W. G.* 1890, 248.) Rosaceæ. H. Deciduous shr. with large elliptic l. 4–5 in. long by 2–2½ in. broad, entire, mucronate, dull green above, grey beneath. Fl. in compound umbels, white. Fr. globose, bright coral-red. Sikkim.

Cotyledon Barbeyi. (*G. C.* 1893, xiii. 624: *Gfl.* 1896, 465, f.) Crassulaceæ. G. per. allied to *C. orbiculata*, with tall branching stems and fleshy glaucous l. 3 in. long. Fl. numerous in a sub-globose panicle; corolla 1 in. long, green and red. Arabia Felix.

Cotyledon edulis (*G. C.* 1883, xx. 172; *Fl. and P.* 1883, 157.) G. Short thick stems, bearing thick obtusely-subtrigonous glaucous l., and cymose panicles of white *Sedum*-like fl. California.

Cotyledon Pestalozzæ. (*G. C.* 1877, viii. 456. f. 89.) H. like *C. libanoticus*, but glaucous and covered with reddish glandular hairs; cauline l. broader and more spathulate. Infl. paniculate; fl. pink. Cilicia.

Cotyledon Purpusii. (*N. B.* 1896, 161.) H. Nearly allied to *Echeveria farinosa*, but differing in the narrow angled pyramid-formed red corollas. Sierra Nevada, North America.

Cotyledon quitensis. (*W. G.* 1893, 144, f. 33.) G. A dwarf branched plant, with red fl. born in racemes. [This plant is altogether different from the true *C. quitensis*, Baker.]

Cotyledon ramosissima. (*B. M.* t. 6417.) G. Dwarf, shrubby, and much branched. L. opposite, crowded towards the end of branches, broadly elliptic-obovate, apiculate, glaucous, flat above, convex beneath. Fl. solitary at the apex of each branch, nodding; calyx green, shortly 5-toothed; corolla 1 in. long, tube pale glaucous green, lobes spreading recurved, pale purple. South Africa.

Coutarea Scherffiana. (*Ill. H.* 1878, t. 321.) Rubiaceæ. G. Glabrous, shr. L. opposite, shortly petioled, ovate-lanceolate, acuminate. Fl. solitary, disposed in terminal leafy clusters, large, campanulate, with 6 spreading ovate-triangular lobes, white. Colombia.

Crassula aloides. (*K. B.* 1896, 161.) S. Like an Aloe, the l. being green, fleshy, a foot or more long, 2 in. wide at the base. The fl.-scape is 3–4 ft. high, bearing a corymb 18 in. across of small pale yellow fl. Transvaal.

Crassula alpestris. (*G. C.* 1878, x. 780.) G. A small glabrous species, with erect slender simple or slightly branched reddish stems, sessile opposite connate or slightly decurrent fusiform apiculate l. ⅓ in. long, and terminal 3-5 forked cymes, 1-1½ in. in diam. Corolla ½ in. long; white pet. linear-oblong, obtuse, thickened and somewhat hooded at the recurved tips. South Africa.

Crassula hybrida albiflora. (*Lemoine Cat.* 1894.) G. A hybrid between *Crassula jasminea* and *Rochea odorata*.

Crassula impressa. (*G. C.* 1879, xii. 328.) G. Like *C. Bolusii*, but with larger l. and rose-coloured fl. Radical l. in a lax rosette, spreading, linear-lanceolate, acute, fleshy, flat above, convex beneath: face impressed-punctate, green or purplish, beneath purplish, with a few obscure dark green dots; margins retrorsely ciliate, as are also the terete flowering stems. Corymb small, terminal; fl. rose pink, South Africa.

Crassula monticola. (*G. C.* 1882, xviii. 264.) G. A dwarf bushy species, with thick connate ovate acute glaucous l., and terminal corymbs of pinkish fl. South Africa.

Crassula ramuliflora. (*Gfl.* t. 1013.) G. Stems procumbent, bearing fleshy ovate or ovate-lanceolate acute l., and

axillary few-flowered cymes of white fl. The stem and l. are covered with reflexed hairs. South Africa.

Crassula recurva. (*G. C.* 1890, viii. 684; *H. G.* 1890, 557.) G. Near *C. rubicunda*. L. greyish-green, mottled with purplish-crimson. Stems 1 ft. high. Fl. in flat-topped cymes, crimson. Zululand.

Crassula rhomboidea. (*G. C.* 1886, xxvi. 712.) G. 2–3 in. high, glabrous. L. rhomboidal, swollen above the middle, subacute, ¾–1 in. long, ½–3 in. broad, ¼–½ in. thick, glaucous, punctate-dotted. Fl. in short-stalked terminal few-flowered cymes, pale flesh-coloured. Transvaal.

Crassula Schmidtii. (*Gfl.* t. 1225.) G. [*C. impressa*, N. E. Br.]

Crassula Schweinfurthii (*Gfl.* 1892, 525.) S. A dwarf tufted species with white fl. Abyssinia.

Cratægus Bruanti. (*R. H.* 1884, 422.) Rosaceæ. H. [*C. Oxyacantha semperflorens.*]

Cratægus Carrierei. (*Fl. and P.* 1883, 10: *R. H.* 1883, 108, t.) H. Shr., with cuneate-oblong acute serrate l., corymbs of large white fl., and clusters of large scarlet fruit. Garden origin.

Cratægus grignoniensis. (*W. G.* 1890, 248.) H. Shr. with lanceolate l., and yellowish-green or lemon-yellow fr., tinted with red.

Cratægus mexicana Carrieri. (*G. C.* 1888, iv. 736. f. 104.) H. [*C. Carrieri*, Varwel.]

Cratægus Oxyacantha, foliis tricoloribus. (*R. H.* 1886, 398.) H. Foliage variegated with different shades of dark red, carmine and rose.

—— Var. **semperflorens.** (*Fl. and P.* 1883, 42.) H. Said to bloom all through the summer.

Cratægus pinnatifida major. (*G. C.* 1886, xxvi. 621, f. 121.) H. Tree with long-stalked lobed and pinnatifid l., and corymbs of large-sized white fl., succeeded by large pear-shaped fr., ¾ in. in diam., of a fine bright red. North China.

Crawfurdia luteo-viridis. (*B. M.* t. 6539.) Gentianaceæ. G. Climber, with slender reddish twining stems, cordate-ovate acuminate green l., becoming purplish with age, and axillary clustered sessile fl. Calyx-teeth linear, as long as the tube. Corolla tubular, with a spreading shortly 5-lobed limb, green, with the spaces alternating with the lobes white. Berries oblong, on a long stalk, protruding beyond the persistent corolla, bright scarlet. Sikkim.

Crescentia nigripes. (*R. H.* 1882, 464, f. 99.) Bignoniaceæ. S. Shr., with large oblanceolate acute l. reddish when young, and clustered terminal greenish-yellow fl.; the corolla where it passes beyond the calyx is sharply bent at an angle and inflated; mouth crenulated.

Crinodendron hookerianum. (*Veitch Cat.* 1881, 8, 14.) Tiliaceæ. G. Shr. L. alternate, lanceolate, acute, serrate. Fl. solitary or in pairs, axillary, on long pendulous peduncles. Corolla ovoid-campanulate, 1 in. or more across, brilliant scarlet-crimson; pet. thick and wax-like in texture, three toothed. [*Tricuspidaria dependens*, Ruiz and Pav. *B. M.* t. 7160.] Chile.

Crinum abyssinicum. (*Gfl.* 1892, 412, f. 89; *W. G.* 1896, 236, f.) Amaryllidaceæ. G. or H. H. bulb, with erect bluish-green l., and umbels of long-tubed fragrant white fl. Abyssinia.

Crinum amœnum. (*Bull Cat.* 1880, 3.) G. Fl. fragrant, white, tinted outside with rose, 5 in. across. Stamens and style crimson. Assam.

Crinum Balfourii. (*B. M.* t. 6570; *G. C.* 1880, xiv. 695.) S. L. lorate, sub-obtuse, about 1 ft. long. Scape 1½–2 ft. long with a many-flowered umbel of shortly stalked white fl. Perianth tube 2½ in. long. Socotra.

Crinum bracteatum purpurascens. (*Fl. and P.* 1879, 109: *Veitch Cat.* 1879, 22, 30.) S. L. linear-lanceolate, slightly undulate. Scape slender, 9–12 in. high, light purple; umbel 4–9-flowered; perianth tube purple; perianth segments linear-lanceolate, acuminate, spreading, white, faintly tinted with rose; filaments purplish-crimson, anthers yellow. West Africa.

Crinum crassipes. (*G. C.* 1887, ii. 126.) S. Bulb very large, conical. L. lorate, suberect, 4 in. broad, bright

green. Scape compressed, less than 1 ft. long, ¾ in. thick. Fl. 15–20 in an umbel: tube 3 in. long: limb sub-erect, 2½ in. long; the segments ½ in. broad, white, with a pink keel. Stamens with claret-purple filaments.

Crinum Doriæ. (*B. T. O.* 1894, 19.) S. L. broad, wavy at the margins. Scape short, surmounted by a many-flowered umbel of scented white red striped fl. Abyssinia.

Crinum firmifolium. (*G. C.* 1892, xi. 362.) S. L. lorate, 3 ft. long by 1½ in. broad. Scape 1 ft. long, bearing an umbel of eight fl., which are 6 in. long, with narrow white segments. Madagascar.

Crinum forbesianum. (*B. M.* t. 6545.) G. or S. L. broad, with white serrulated margins, and a short scape with a many-flowered umbel of sessile long-tubed fl., white, flushed and striped with bright rose-red. Delagoa Bay.

Crinum grandiflorum. (*R. H.* 1894, 147.) H. H. A garden hybrid between *C. careyanum* and *C. capense*.

Crinum jemense. (*B. T. O.* 1892, 133, f. 6.) G. Broad shining green l., and large umbels of pure white fl. [*C. latifolium*, Linn.] Arabia.

Crinum Kircape. (*G. and F.* 1895, 288.) G. A garden hybrid between *C. Kirkii* and *C. capense* (*C. longifolium*).

Crinum Kirkii. (*B. M.* t. 6512.) S. L. 3–4 ft. long, 4½ in. broad, the margins ciliated. Scapes 2 or 3 to a bulb, 1½ ft. high, bearing an umbel of 12–15 large fl. The perianth segments are white, with a broad red stripe down the centre of each. Zanzibar.

Crinum kunthianum. (*W. G.* 1899, 358, f. 76.) S. L. in a large rosette, 12–20 in. long, wavy on the margin. Peduncle about as long as the l., bearing 4–7 large white fragrant fl., marked with a red stripe down each segment.

Crinum Lesemanni. (*W. G.* 1896, 125, t. 1.) H. H. A garden hybrid between *C. longifolium* and *C. makoyanum*, and identical with *C. Powellii*, a hybrid of the same parentage.

Crinum leucophyllum. (*B. M.* t. 6783.) S. Bulb nearly 6 in. in diam., producing 12–14 distichous l., 1½–2 ft. long, 5–6 in. broad, of a whitish-green colour. Scape arising from the base of the l., 1 ft. long, flattened, bearing a large umbel of 40 or 50 pinkish-white fl. 3 in. in diam., with a cylindric tube 3 in. long, and linear spreading perianth segments. Damaraland.

Crinum longifolium farinianum. (*G. C.* 1837, i. 833.) G. Bulb narrow, with a long neck. L. 3–4 ft. long, 2 in. broad, glaucous. Scape from the side of the bulb, 2 ft. long, bearing 5–6 fl. on pedicels 1–2 in. long: fl.-tube 3½–4 in. long, fl. about 3 in. in diam., funnel-shaped, white with a pink median stripe on the segments when first expanded, afterwards fading to pink, and the segments closing together; the tube curved and about 3½–4 in. long. Kalahari Desert.

Crinum Macowani. (*B. M.* t. 6381; *G. C.* 1878, ix. 298.) G. In the way of *C. latifolium*, but finer. L. 3–4 ft. long, 3–4 in. broad: margins denticulate. Fl. large, of a delicate blush pink, on pedicels 2–4 in. long. Natal.

Crinum makoyanum. (*R. H.* 1877, 417.) G. Bulb large, with a long neck surmounted by a crown of large lanceolate l., 24–30 in. long by 3–4 in. broad, gracefully recurved. Scape from the side of the bulb 30 in. or more high, glaucous green; umbel few-flowered: fl. white, tinted with rose-carmine, campanulate, 4–6 in. in diam., sweet-scented. [*C. Moorei*, Hook. f.] Caffraria.

Crinum massaianum. (*K. B.* 1888, 100.) S. Allied to *C. Kirkii*, with a very elongated bulb about 18 in. long, and long broad l. The fl.-stem is about 2½ ft. high, and bears a large many-flowered umbel of large white fl., having a red stripe down the centre of each segment. Zanzibar.

Crinum Moorei variegatum. (*Bull Cat.* 1895, 6.) G. L. striped with yellow.

Crinum ornatum rubro-vittatum. (*Bull Cat.* 1876, 5.) G. Like *C. ornatum*, but the fl. are white, with a rosy crimson band along each segment. Brazil.

Crinum pedunculatum pacificum. (*Bull Cat.* 1882, 14, f. 11.) S. Known as the Wedding Lily. It has lanceolate

recurved l., and immense umbels of from 20–30 white fl., each fl. being 4–5 in. in diam., with linear recurved segments. Lord Howe's Island.

Crinum podophyllum. (*B. M.* t. 6483.) S. L. 5 or 6, lanceolate, undulate, contemporary with the fl. Scape about 1 ft. high, 2-flowered. Fl. sessile, the slender green tube 6–7 in. long. Perianth white; segments at length spreading. Old Calabar.

Crinum Powelli. (*Fl. and P.* 1884, 155.) H. A garden hybrid between *C. Moorei* and *C. longifolium*.

—— Vars. **album** and **intermedium.** (*G. C.* 1888, iv. 483.)

Crinum purpurascens. (*B. M.* t. 6525.) S. L. numerous, strap-shaped, acute, wavy, deep green, 1½–2 ft. long. Scape purplish, about 1 ft. long, bearing a few-flowered umbel of sessile white fl. with a slender tube 5–6 in. long; stamens and style red. West Tropical Africa.

Crinum roozenianum. (*G. C.* 1891, ix. 701; 1894, xv. 199, f. 20; *Gfl.* 1891, 390.) S. Near *C. americanum*, although the growth is something like that of *C. erubescens*. Fl. 4–12 in an umbel, white; filaments red. [*C. erubescens*. Ait. var. *minus*, Hort.] Jamaica.

Crinum sanderianum. (*G. C.* 1884, xxii. 102; *Fl. and P.* 1884, 156, f.) S. Allied to *C. zeylanicum* but smaller; bulb globose, 2 in. in diam., with a cylindrical neck, 2 in. long. L. ensiform, 1-1½ ft. long, 1–1½ in. broad, thin, tapering to a long point and undulated towards the broad membranous obscurely-toothed margins. Umbel 3 4-flowered: fl. sessile: tube 5–6 in. long, curved: limb horizontal, 4 in. long: segments connivent, lanceolate, acuminate, white, with a red keel. Sierra Leone.

Crinum Schimperi. (*Gfl.* t. 1309; *B. M.* t. 7417.) G. Bulb, with an elongated neck. L. 6–7, strap-shaped, glaucous, slightly scabrous on the margin. Umbel about 4-flowered; fl. sessile, white; the tube rather abruptly curved just below the funnel-shaped limb; stamens white.

Crinum Schmidti. (*Gfl.* t. 1072.) G. L. entire, oblong-lanceolate, acute; umbel on a tall scape 8–10-flowered. Fl. large, subsessile, nodding, campanulate, white. [*C. Moorei*, Hook. f. var *album*.] Natal.

Crinum vanillodorum. (*Ill. H.* 1886, t. 617.) S. Bulb long-necked, bearing lanceolate l. 16–20 in. long, by 2–3 in. broad, and a lateral scape overtopping the l., with an umbel of 5–6 long-tubed white fl. with broad and rather spreading segments. [*C. giganteum*, Andr.] Congo; Angola.

Crinum verschaffeltianum. (*G. C.* 1878, ix. 430.) G. or S. A tall growing form, with oblong strap-shaped l., striped longitudinally with narrow white bands.

Crinum yuccæfolium. (*Gfl.* 1892, 525.) S. Similar to *C. abyssinicum*, but smaller in every part. Abyssinia.

Crinum zeylanicum reductum. (*G. C.* 1883, xx. 618.) S. L. ensiform, spreading, 1–1½ ft. long, 18–21 lin. broad, gradually narrowed from middle to apex; edge not ciliated. Scape lateral, under 1 ft. long; fl. about 4 in an umbel, sessile, 5–6 in. long, white, with a red central stripe on the segments. Zanzibar.

Crocosma aurea imperialis. (*W. G.* 1888, 340.) Iridaceæ. H. H. Growing to 3 ft. in height. Fl. fiery orange-red, nearly twice as large as in the type. South Africa.

—— Var. **maculata.** (*G. C.* 1888, iv. 407. 565. f. 80.) H. H. Fl. large, orange, having the three inner segments marked near the base with a dark red-brown spot. South-east Africa.

Crocus aerius. (*B. M.* t. 6852, f. b.) Iridaceæ. H. Allied to *C. biflorus*. Corm with a brown cartilaginous tunic. L. linear, short when in fl. Fl. 2 in. in diam., pale lilac, with a yellow throat. Anthers yellow. Stigmas entire, orange-red. Asia Minor.

Crocus alatavicus. (*Gfl.* t. 906, f. 1.) H. L. narrow, linear, glabrous, green with a white midrib, over-topping the fl. Fl. white inside, yellow at the base; outside densely striolate with purple. Alatau Mountains, Central Asia.

—— Var. **ochroleucus.** (*G. C.* 1878, ix. 234.) H. Fl. with the outer segments pale dull yellow on the back, passing into white at the edge, inner segments white, all without any graining.

Crocus alatavicus porphyreus. (*G. C.* 1878, ix. 234.) H. Fl. with the outer segments bright claret-purple, and the inner segments white, all grained at the base as in the type.

Crocus biflorus Leichtlinii. (*G. C.* 1891, ix. 235.) H. A var. of *C. biflorus* with white or pale purple fragrant fl., having narrow lanceolate segments. Mardin, Asia Minor.

Crocus Billiotii. (*Gard.* 1892, xli. 116.) H. Allied to *C. aerius*, differing in having a basal spathe, and no rings on the corm-tunic. Fl. dark rich purple, with a darker blotch near the throat. Trebizond, Asia Minor.

Crocus chrysanthus fuscolineatus. (*G. C.* 1876, v. 622.) H. Fl. with the outer segments marked on the back with 5 clear feathered stripes of reddish brown. Stigmas bright orange. Asia Minor.

—— Var. **fuscotinctus.** (*G. C.* 1876, v. 622.) H. Fl. with the outer segments broadly suffused with sepia-brown all down the back. Stigmas deep red-orange.

Crocus Crewii. (*Gard.* 1893, xliii. 278; *B. M.* t. 6168.) H. Allied to *C. biflorus*, with almost black anthers and a rich orange centre. Asia Minor.

Crocus etruscus. (*G. C.* 1876, v. 622; *B. M.* t. 6362.) H. Corm with coarse fibrous outer coats, bearing 2–4 l. contemporary with the fl., very narrow, with a white central vitta. Fl. with a yellow glabrous throat, and deep lilac-purple limb: the outer segments with 5 feathered dark purple stripes down the back. Stigmas deep orange-yellow. Tuscany.

Crocus hyemalis Foxii. (*Gard.* 1892, xli. 18.) H. A var. with white fl. having a yellow throat and black anthers.

Crocus Imperati vars. **albiflorus, atropurpureus, flore pleno, lilacinus,** and **pallidus.** H. (*B. T. C.* 1888, 135.)

—— Var. **purpureus.** (*Gfl.* t. 1280, f. 2; *H.G.* 1888, 500; *B. T. C.* 1888, 135.) H. A purple-flowered form.

Crocus Karduchorum. (*G. C.* 1886, xxvi. 404; *Gard.* 1889, xxxvi. 426), H. Corm with delicate membranous fibres; the cap produced into a bunch of sharp points. L. 1–2 in. long, $\frac{1}{20}$ in. broad, those of the previous year persistent to autumnal flowering time. Spathe monophyllous, 1 in. high. Perianth tube long, throat unbearded, uniform in colour, with vinous-lilac segments, which are 1–1¼ in. long. Anthers, cream coloured. Style cream coloured. Kurdistan; Armenia.

Crocus Korolkowi. (*B. M.* t. 6852, f. a.) H. Like the common yellow Dutch *Crocus*, but distinguished by the narrower segments of its yellow fl. the 3 outer ones of which are brownish outside. Stigmas entire, orange-red. Central Asia.

Crocus luteus striatus. (*G. C.* 1893, xiii. 385.) H. A form of the ordinary Dutch *Crocus*, with three distinct black stripes on the back of the outer segments of the perianth.

Crocus Mouradi. (*Gard.* 1889, xxxv. 473.) Corm oblate, 1 in. broad, ⅝ in. high. Sheathing l. 4, the highest 5 in. above the corm; proper l. 7–8, ⅛ in. broad. Fl. bright orange; style pale orange; anthers pale yellow. A vigorous grower, intermediate between *C. chrysanthus* and *C. aureus*. Mourad-dagh, Smyrna.

Crocus Scharojani. (*G. C.* 1879, xii. 235: *Gfl.* t. 578.) H. A distinct orange-flowered *Crocus*, flowering before the l. appear; distinguished from its nearest allies by its acute perianth segments and shortly trifid stigma. Stauros and West Caucasus.

Crocus Tauri melanthorus. (*G. C.* 1893, xiii. 226.) H. A form of *C. Tauri* with black anthers. Smyrna.

Crocus vitellinus. (*B. M.* t. 6416, f. 3.) H. L. 5–6, contemporary with the fl. and equalling or slightly overtopping them. Perianth concolorous, bright orange yellow. Styles fulvous, cut into numerous slender branches. Syria.

—— Var. **syriacus.** (*B. M.* t. 6416, f. 1–2.) A pretty var. differing from the type in its darker orange perianth, with feathered dark brown lines down the back of the segments.

Crocus Weldeni. (*B. M.* t. 6211.) H. Allied to *C. biflorus*. L. 4–5, as long or a little longer than the flower, with a distinct white line on the face; margins revolute. Fl. white; the three

outer segments on the back more or less lavender-blue, with white margins; anthers lemon-yellow ; stigma fulvous, with 3 entire clavate branches. Dalmatia.

Crossandra guineensis. (*B. M.* t. 6346.) Acanthaceæ. S. L. oblong, obtuse, of a deep green, beautifully reticulated with white veins. Fl. in a short dense spike. Corolla ½ in. in diam., 5-lobed ; the two upper lobes smaller than the others and erect ; colour pale lilac with a white eye, and a purple spot at the base of each upper lobe. West Tropical Africa.

Crossandra infundibuliformis. (*Bull Cat.* 1882, 14, f. 6 ; *G. C.* 1882, xviii. 653, f. 115.) S. L. stalked, elliptic, acute at both ends. Fl. large, reddish-orange, in compact spikes. [*C. undulæfolia*, Salisb.] East Indies.

Crotalaria longirostrata. (*B. M.* t. 7306.) Leguminosæ. G. 3 ft in height, with thin branches, clothed with trifoliate l. and bearing in winter erect racemes of rich yellow fl. Mexico.

Croton alabamensis. (*G. and F.* 1889, 592.) Euphorbiaceæ. H. A woody shrub 6–10 ft. high, with whitish bark, oblong lanceolate scaly l., and racemes of small whitish fl. Alabama.

Croton aureo-lineatus. (*Bull Cat.* 1878, 5.) S. L. obovate-lanceolate, acuminate, cuneate at base, bright green along the midrib ; the margins and a line from midrib to near the margins all clear yellow. [*Codiæum aureo-lineatum.* Year-book, 1879.] Fiji Islands.

Croton aureo-maculatus. (*Veitch Cat.* 1878, 26 ; *G. C.* 1878, ix. 430.) S. Resembling a small form of *C. aucubæfolius*, with neat habit and small oblong-ovate l., bright green spotted with yellow. [*Codiæum aureo-maculatum.* Year-book, 1879.]

Croton aureo-marmoratus. (*Fl. and P.* 1882, 122.) S. A var. with long lanceolate l. more or less marbled with yellow. [*Codiæum aureo-marmoratum.* Year-book, 1883, 88.]

Croton aureo-punctatus. (*Bull Cat.* 1883, 12.) S. A small form with linear obtuse l., bright green, dotted and spotted with yellow. [*Codiæum aureo-punctatum.* Year-book, 1884, 88.]

Croton austinianus. (*Williams' Cat.* 1883, 25.) S. A compact form of dwarf branching habit, with oblong-ovate erect l., 6–9 in. long by 2 in. broad, blotched and marbled with creamy white and suffused with pink ; margins undulated. [*Codiæum austinianum.* Year-book, 1884, 88.]

Croton Bergmanni. (*Lind. Cat.* 1880, 12 ; *Ill. H.* 1880, t. 389.) S. L. elliptic of a dark green, with the veins and a broad irregular central band ivory-white. [*Codiæum Bergmanni.* Year-book, 1881, 159.]

Croton Bismarcki. (*Bull Cat.* 1876, 5.) S. L. almost panduriform, basal half broadest and obovate, middle part narrowed, apical part ovate, deep green, with a golden band along the costa, yellow markings along the lateral veins, and a few slight yellow blotches scattered over the surface. [*Codiæum Bismarcki.* Year-book, 1877, 155.] South Sea Islands.

Croton bragæanus. (*Veitch Cat.* 1882, 17 ; *Fl. and P.* 1882, 122.) S. L. long, pendent, linear-lanceolate, 18–21 in. long, some of a pale yellow mottled with light green, others green spotted with yellow, changing to an olive green spotted with different shades of yellow ; midrib crimson. [*Codiæum bragæanum.* Year-book, 1883, 88.]

Croton Broomfieldii. (*Bull Cat.* 1881, 16.) S. L. oblong-lanceolate, of a very dark green, blotched and lined with yellow. [*Codiæum Broomfieldii.* Year-book, 1882, 170.]

Croton camptophyllus. (*G. C.* 1877, vii. 367 ; *Williams' Cat.* 1877, 19.) S. L. narrow, linear, twisted and curved, 6–9 in. long, ¼ in. broad, obtuse, shortly pointed, green with a yellow central stripe. [*Codiæum camptophyllum.* Year-book, 1878, 154.] South Sea Islands.

Croton Carrierii. (*Ill. H.* 1880, 90 ; *Lind. Cat.* 1880, 13.) S. L. lanceolate, variegated with golden yellow. [*Codiæum Carrierii.* Year-book, 1881, 159.]

Croton caudato-tortilis. (*Veitch Cat.* 1883, 14.) S. L. pendulous, twisted, some deep olive-green, with a yellow central band and crimson mid-rib ; others almost all yellow, becoming

suffused with crimson with age; others variously blotched and spotted. [*Codiæum caudato-tortile*. Year-book, 1884, 88.]

Croton Chelsoni. (*Bull Cat.* 1879, 4.) S. Narrow-leaved form. L. sometimes flat, sometimes spirally twisted. bright orange-pink shaded with crimson. [*Codiæum Chelsoni*. Year-book, 1880, 147.] New Guinea.

Croton concinnus. (*Bull Cat.* 1876, 5.) S. L. lanceolate, flat, 5–9 in. long, marked along the mid-rib by a well-defined broad yellow band. and the lateral veins in thin yellow lines which are more or less reticulately united near the edge. [*Codiæum concinnum*. Year-book, 1877, 155.]

Croton contortus. (*Bull Cat.* 1876, 5.) S. A mere form of *C. imperiale*, less variegated. [*Codiæum contortum*. Year-book, 1877, 155.]

Croton cortortus. (*Williams' Cat.* 1884, 83.) S. Resembling *C. volutus*, with ovate acuminate recurved l., 6–8 in. long, having cross-veins and margin sulphur yellow on an olive green ground. [*Codiæum contortum*. Year-book, 1885, 83.]

Croton Crœsus. (*Bull Cat.* 1883, 12.) S. A form with oblong-lanceolate l., bright green, blotched with yellow. [*Codiæum Crœsus*. Year-book, 1884 88.]

Croton Cronstadtii. (*Veitch Cat.* 1882. 17. f. 8: *Fl. and P.* 1882, 122.) S. L. long, drooping, linear, twisted and crisped, of a deep glossy green variegated with yellow. [*Codiæum Cronstadtii*. Year book, 1883, 88.]

Croton Dodgsonæ. (*Williams' Cat.* 1882, 25.) S. Linear-lanceolate l., 9–12 in. long, sometimes twisted, bright green, with the margins and central stripe of a rich golden yellow. [*Codiæum Dodgsonæ*. Year-book, 1883, 88.]

Croton Duvali. (*Lind. Cat.* 1880, 13.) S. L. lanceolate, acuminate, bright green variegated with white. [*Codiæum Duvali*. Year-book, 1881, 159.]

Croton eburneus. (*Bull Cat.* 1881, 16.) S. L. elliptic-lanceolate, reeurving, of a deep green, with a broad white central stripe partly continued along the secondary veins. [*Codiæum eburneum*. Year-book, 1882, 170.]

Croton elegantissimus. (*Bull Cat.* 1881, 10, 16.) S. L. long, linear, recurving, green, with the course of the midrib irregularly marked out with bright yellow. [*Codiæum elegantissimum*. Year-book, 1882, 170.]

Croton eminens. (*Bull Cat.* 1883, 12.) S. Of dense habit, with broad lanceolate tapering glossy green l., with the midrib and part of the lateral veins white. [*Codiæum eminens*. Year-book, 1884, 88.]

Croton evansianus. (*Veitch Cat.* 1879, 23, f. 7.) One of the trilobed series; side lobes of leaf short and rounded, middle lobe oblong, acute. Young l. light olive green, with golden yellow venation; with age the green changes to bright bronzy crimson, and the yellow venation becomes a rich orange-scarlet. [*Codiæum evansianum*. Year-book, 1880, 147.] South Sea Islands.

Croton excurrens. (*Bull Cat.* 1884. 12.) S. A form with oblong stalked l., having the midrib excurrent like a small horn near the apex of the l., which is variegated with yellowish-green. [*Codiæum excurrens*. Year-book, 1885, 83.]

Croton Eyrei. (*Fl. and P.* 1882, 171.) A neat form, with long narrow twisted recurved l., freely variegated with yellow; petioles and young branches red. [*Codiæum Eyrei*. Year-book, 1884, 89.]

Croton falcatus. (*G. C.* 1877, vii. 367; *Williams' Cat.* 1877, 19.) S. L. 15–18 in. long, 2–3 in. broad, shortly stalked, sword-shaped or sickle-shaped, dilated and rounded at base, blotched with yellow, with a dark purple midrib and margins. [*Codiæum falcatum*. Year-book, 1878, 154.] South Sea Islands.

Croton fasciatus. (*G. C.* 1877, vii. 367; *Williams' Cat.* 1877, 19.) S. shrub. A broad-leaved form. L. 9–10 in. long, 4–5 in. broad, shortly stalked, obovate, tailed, rounded at base, bright green, with bright yellow veins with a few irregular spots and blotches. [*Codiæum fasciatum*. Year-book, 1878, 154.] South Sea Islands.

Croton Fordii. (*Veitch Cat.* 1880, 20.) S. L. trilobed, at first light green with a yellow midrib. afterwards the midribs become crimson,

and the blades effectively barred and marked with golden yellow. [*Codiæum Fordii.* Year-book, 1881, 159]. Polynesia.

Croton formosus. (*Bull Cat.* 1881, 16.) S. L. long, lanceolate, bright green, veined and spotted with yellow which afterwards changes to red. [*Codiæum formosum.* Year-book, 1882, 170.]

Croton gloriosus. (*Bull Cat.* 1878, 5.) S. L. linear, drooping, slightly undulated, green, marbled with creamy-yellow along the midrib. [*Codiæum gloriosum.* Year-book, 1879.] New Hebrides.

Croton Goedenoughtii. (*Lind. Cat.* 1876, 5.) S. L. long, narrow-lanceolate, clear green variegated with golden yellow. [*Codiæum Goedenoughtii.* Year-book, 1877, 155.] Santa Cruz Islands.

Croton hanburyanus. (*Veitch Cat.* 1880, 25.) S. L. with varied coloration. [*Codiæum hanburyanum.* Year-book, 1881, 159.] Polynesia.

Croton hardwoodianus. (*Veitch Cat.* 1878, 26.) S. L. lanceolate, acuminate, about 1 ft. long, bright green with creamy-yellow midribs when young, deep glossy olive-green with crimson midribs when mature. [*Codiæum hardwoodianum.* Year-book, 1879.]

Croton Hawkeri. (*Veitch Cat.* 1879, 23, f. 8.) S. Dwarf form, with broadly-lanceolate l. about 6 in. long; petioles and central portion of l. creamy-yellow surrounded by a bright green border. [*Codiæum Hawkeri.* Year-book, 1880, 148.]

Croton Hendersoni. (*Bull Cat.* 1877, 3.) S. L. oblong-ovate, acuminate, deep green, reticulately veined with yellow. [*Codiæum Hendersoni.* Year-book, 1878, 154.] South Sea Islands.

Croton illustris. (*Bull Cat.* 1882, 14, f. 8.) S. L. irregularly 3–4-lobed, green, variegated with yellow. [*Codiæum illustre.* Year-book, 1883, 88.]

Croton insignis. (*Bull Cat.* 1882, 14.) S. L. long, narrow, of a deep green, with yellow along the veins, and rosy-crimson midrib and margins. [*Codiæum insigne.* Year-book, 1882, 14.]

Croton intermedius. (*Lind. Cat.* 1876, 5.) S. L. large, green, with the nerves and spots yellow, rose, or red. [*Codiæum intermedium.* Year-book, 1877, 155.]

Croton kingianus. (*Bull Cat.* 1881, 17.) A var. with oblong-obovate l. 12–18 in. long, 5–8 in. broad, deep green, marked with golden reticulated venation. [*Codiæum kingianum.* Year-book, 1882, 170.]

Croton linearis. (*Williams' Cat.* 1882, 25.) S. L. long linear-lanceolate, of a bright green, marbled with yellow, and suffused with pink. This is probably distinct from the following which bears the same name. [*Codiæum lineare.* Year-book, 1883, 88.]

Croton linearis. (*Bull Cat.* 1882, 14.) S. L. linear 4–6 in. long, of a dark green, with the midrib and some blotches yellow. [*Codiæum lineare.* Year-book, 1883, 88.]

Croton macafeeanus. (*Bull Cat.* 1876, 5.) S. L. broad oblong-ovate, marked with distant yellow spots, and transversely mottled from the midrib half way to the edge. [*Codiæum macafeeanum.* Year-book, 1877, 155.]

Croton Macarthuri. (*Veitch Cat.* 1877, 21.) S. L. linear-lanceolate, variably twisted, crisped, narrowed at apex or dilated at base, bright green with yellow midrib, and irregular markings on each side of it. [*Codiæum Macarthuri.* Year-book, 1878, 154.] South Sea Islands.

Croton maculatus Katonii. (*G. C.* 1878. ix. 430.) S. A var. of the trilobed section, with oblong l. abruptly contracted about the middle into two triangular lobes, the central one prolonged into an obovate pointed lobe. Ground colour rich bright green, thickly spotted with circular yellow spots. [*Codiæum maculatum Katonii.* Year-book, 1879.] Pacific Islands.

Croton magnificus. (*Ill. H.* 1882, t. 447: *Lind. Cat.* 1882, 5.) S. L. lanceolate-oblong, acute, bright green, with a broad irregular area of yellow or red along the midrib. [*Codiæum magnificum.* Year-book, 1883, 88.] Solomon Islands.

Croton majesticus. (*Fl. and P.* 1876, 52.) S. L. linear, 15–18 in. long; young growth deep green, with a golden rib, and markings representing

the venation, but more or less confluent; mature l. deep olive with the variegation deep crimson. [*Codiæum majesticum*. Year-book, 1877, 155.] Polynesia.

Croton massangeanus. (*Ill. H.* 1879, t. 347.) S. A form with long linear-lanceolate, acuminate, l., the young ones creamy-white blotched with green, changing with age to carmine-rose with yellow and dark green blotches between the veins. [*Codiæum massangeanum*. Year-book, 1880, 148.]

Croton microphyllus. (*Williams' Cat.* 1877, 19.) S. L. lanceolate, 9–12 in. long, ½ in. broad, sometimes half-coloured, sometimes with crimson midrib surrounded by a band of yellow, and a pale green margin splashed and speckled with yellow; stem and petioles yellow, tinged with crimson. [*Codiæum microphyllum*. Year-book, 1878, 154.]

Croton mirabilis. (*Williams' Cat.* 1882, 25.) S. A form with ovate acuminate l., 8–10 in. long, 2½ in. broad, bronzy-green, marbled, splashed and veined with crimson. [*Codiæum mirabile*. Year book, 1883, 88.]

Croton Mortii. (*Bull Cat.* 1876, 6.) S. L. large, obovate, acute or shortly acuminate, cuneate at base, very dark green, freckled with yellow dots; the midrib and veins broadly margined with golden yellow. [*Codiæum Mortii*. Year-book, 1877, 155.]

Croton multiformis. (*Williams' Cat.* 1881, 34.) S. A var. with lanceolate spiral or interrupted l. of a bright green, mottled with light yellow and tinted or margined with rosy crimson. [*Codiæum multiforme*. Year-book, 1882, 170.]

Croton musaicus. (*R. H.* 1882, 240, t.) L. oblong-lanceolate, acuminate, wavy, of a crimson colour, with one or two series of irregular green blotches on each side of the midrib; in the young l. the crimson is replaced by cream colour. [*Codiæum musaicum*. Year-book, 1884, 89.]

Croton Nevilliæ. (*Veitch Cat.* 1880, 21, 9.) S. L. oblong-lanceolate, olive green when young, barred and marked with yellow; when mature the yellow changes to crimson shaded with orange and the green becomes darker, with a metallic hue. [*Codiæum Nevilliæ*. Year-book, 1881, 159.] Polynesia.

Croton Newmanii. (*Bull Cat.* 1887, 6, 10 f.) S. A form of *Codiæum variegatum*, with lanceolate l., variegated with yellow and white on a bright green ground, the variegation forming a broad central stripe. Polynesia.

Croton nobilis. (*Veitch Cat.* 1877, 22; *Williams' Cat.* 1877, 19.) S. L. long linear, recurving, green with crimson petioles and midribs, with spots and irregular borders of deep golden yellow along the midribs. [*Codiæum nobile*. Year-book, 1878, 154.] South Sea Islands.

Croton ornatus. (*Bull Cat.* 1881, 17.) S. A variety with oblong, slightly undulated l., 9 in. long, and about 2 in. broad, deep green with a narrow central band, and long parallel veins of creamy-yellow; here and there blotched with yellow, the yellow becoming tinged with crimson. Sometimes the l. are bronzy green, with rose lines and blotches. [*Codiæum ornatum*. Year-book, 1882, 170.]

Croton paradoxus. (*G. C.* 1877, vii. 367; *Williams' Cat.* 1877, 207.) S. A narrow-leaved form, with short petioles. L. 10–12 in. long, linear-oblong with a spiny point, at first green, afterwards variegated with yellowish stripes and spots, especially in the centre; midrib pink, under surface paler. Some of the l. are twisted or interrupted in the middle. [*Codiæum paradoxum*. Year-book, 1878, 155.] South Sea Islands.

Croton Phillipsii. (*Williams' Cat.* 1886, 24.) S. L. linear-lanceolate, 8–10 in. long by ¾ in. broad, the base of the l. rich golden yellow, extending half way through, and continuing along the centre nearly the whole length. [*Codiæum Phillipsii*.]

Croton picturatus. (*R. H.* 1888, 423.) S. A garden var. of *Codiæum variegatum*.

Croton pictus elongatus. (*Ill. H.* 1877, t. 299; *Lind. Cat.* 1878, 4.) S. L. erect and spreading, linear-lanceolate, acuminate, bright green, with the midrib, veins, and a line near the margin all bright yellow. [*Codiæum pictum elongatum*. Year-book, 1879.]

—— Var. **lyratus.** (*Ill. H.* 1877, t. 293; *Lind. Cat.* 1878, 4.) S. L. sub-erect, 6–8 in. long, 2½–3 in. broad; basal half obovate, from a sudden contraction about the middle, with the central

part prolonged into a much narrower oblong-lanceolate acute lobe, bright green, with the midrib and veins bordered with yellow. [*Codiæum pictum lyratum*. Year book, 1879.]

Croton picturatus. (*Bull Cat.* 1876, 6.) S. L., some lanceolate-linear, others broadly elliptic at base, with the midrib excurrent for an inch or so, and terminated by a peltate narrow oblong blade; green blotched with clear yellow passing to red, midrib bright red. [*Codiæum picturatum*. Year-book, 1877, 155.] New Hebrides.

Croton Pilgrimii. (*Williams' Cat.* 1882, 25.) S. L. ovate, acuminate, 6-9 in. long, 3 in. broad, pale green, with deep golden markings suffused with rich pink. [*Codiæum Pilgrimii*. Year-book, 1883, 89.]

Croton princeps. (*Bull Cat.* 1878, 155.) S. L. linear, normal, or appendiculate, at first green with yellow midrib and margins, and a few yellow blotches, afterwards bronze with the yellow markings passing into rich crimson. [*Codiæum princeps*. Year-book, 1879.] New Hebrides.

Croton recurvatus. (*Bull Cat.* 1883, 12.) S. L. elegantly recurved, lanceolate, acuminate, marked with yellow along the crimson midrib and lateral veins. [*Codiæum recurvatum*. Year-book, 1884, 89.]

Croton Reginæ. (*Veitch Cat.* 1878, 22.) S. L. 6–8 in. long, 2–2½ in. broad, deep olive green, sparingly spotted with yellow; the veins and midrib rich crimson, bordered with a lighter colour shading into bright orange: the margins with a narrow band of the same tint. [*Codiæum Reginæ*. Year-book, 1879.] Pacific Islands

Croton Rex. (*Bull Cat.* 1877, 3.) S. L. strap-shaped, drooping, undulated and sometimes twisted, bronzy-green, with a rich crimson midrib; young l. veined and spotted with yellow, which colour changes to crimson with age. [*Codiæum Rex*. Year-book, 1878, 155.] South Sea Islands.

Croton rodeckianus. (*Williams' Cat.* 1881, 34.) S. A var. with pendent arching linear l., 15–18 in. long, 1 in. broad, blotched and mottled with creamy-white, and tinted with rose. [*Codiæum rodeckianum*. Year-book, 1882, 170.]

Croton roseo-pictus. (*Bull Cat.* 1878, 5, t. xi.) S. L. oblanceolate, shortly acuminate, green, bordered along the midrib, veins, and margins with yellow, which towards the margins takes on a rosy tint. (*Codiæum roseo-pictum*. Year-book, 1879.]

Croton ruberrimus. (*Bull Cat.* 1884, 12.) S. One of the narrow drooping-leaved forms, with the usual creamy and crimson variegation. [*Codiæum ruberrimum*. Year-book, 1885, 83.]

Croton rubescens. (*Bull Cat.* 1882, 14.) S. L. elliptic-lanceolate, veined and spotted with yellow, which spots finally change to crimson. [*Codiæum rubescens*. Year-book, 1883, 89.] Polynesia.

Croton rubro-lineatus. (*Fl. and P.* 1882, 122.) S. L. oblong-lanceolate, at first pale yellow and green (some tinged with rose), becoming golden yellow and olive green, with crimson veins and margin. [*Codiæum rubro-lineatum*. Year-book, 1883, 89.]

Croton Russelli. (*G. C.* 1893, xiv. 629; *J. of H.* xxvii. 493, f. 71.) S. [*Codiæum pictum*, var.]

Croton spectabilis. (*Bull Cat.* 1882, 14.) S. L. obovate-elliptic, green, with pale primrose-yellow midrib and pale yellow blotches. [*Codiæum spectabile*. Year-book, 1883, 89.]

Croton Spincki. (*Lind. Cat.* 1880, 14.) S. The lower l. bright green washed with white; the others golden-yellow, passing quickly into white, clouded with dark green. [*Codiæum Spincki*. Year-book, 1881, 159.]

Croton splendidus. (*Bull Cat.* 1876, 6.) S. Var. of *C. majesticus*, differing in its shorter l. [*Codiæum splendidum*. Year-book, 1877, 155.] New Hebrides.

Croton Stewartii. (*Williams' Cat.* 1880, 14.) S. L. broad, obovate, cuspidate, of a dark olive green, irregularly banded and margined with rich orange. Midribs and petioles bright magenta. [*Codiæum Stewartii*. Year-book, 1881, 159.] New Guinea.

Croton superbiens. (*Bull Cat.* 1878, 5.) S. L. oblong, acute, rounded at base; young l. green with clouded yellowish markings; as they mature the green deepens, the yellow brightens, and the coppery-red veining and

margins are brought out ; subsequently the green becomes dark-bronze, while all the pale portions become copper-coloured, the veins and midrib being crimson. [*Codiæum superbiens*. Year-book, 1879.] New Guinea.

Croton Thomsoni. (*G. C.* 1893, xiii. 641.) S. One of the many seedling var. of *Codiæum pictum*.

Croton torquatus. (*Bull Cat.* 1878, 5.) S. L. narrow, broken up into chain-like segments by being contracted to the midrib in places, dark green with a yellow midrib and a few scattered spots, these markings ultimately changing to red. [*Codiæum torquatum*. Year-book, 1879.] South Sea Islands.

Croton torrigianus. (*Fl. and P.* 1884, 94.) S. L. flat, 1 in. broad, green with yellow veins and margin, which afterwards change to crimson. [*Codiæum torrigianum*. Year-book, 1885, 83.]

Croton tortilis. (*Veitch Cat.* 1877. 22.) S. Shr., with linear-oblong spirally twisted obtuse bristle-pointed l., deep olive-green spotted with yellow, and with a line of yellow on each side of the crimson midrib. [*Codiæum tortile*. Year-book, 1878, 155.] South Sea Islands.

Croton tricolor. (*Bull Cat.* 1882, 14.) S. L. narrowly lanceolate, the midrib and the abundant blotches yellow, changing to bright rosy crimson; petioles crimson. [*Codiæum tricolor*. Year-book, 1883, 89.]

Croton trilobus Alberti. (*Bull Cat.* 1876, 6.) S. A trifling var. of *C. trilobus*. [*Codiæum trilobum Alberti*. Year-book, 1877, 155.] South Sea Islands.

Croton triumphans. (*Bull Cat.* 1878, 6.) S. Spreading oblong-lanceolate acuminate l., deep green, with the midrib and veins bordered with golden yellow ; midrib crimson. [*Codiæum triumphans*. Year-book, 1879.] New Hebrides.

Croton Van-Oosterzeei. (*Ill. H.* 1883, t. 502.) S. L. narrow, linear-lanceolate, of a dark green, spotted with yellow. [*Codiæum Van-Oosterzeei*.]

Croton variabilis. (*Veitch Cat.* 1877, 22.) S. L. long, straight, recurved, falcate, distorted, smooth or undulate, marbled and blotched with different shades of yellow, orange, and crimson. [*Codiæum variabile*. Year-book, 1878, 155.] South Sea Islands.

Croton vittatus. (*Bull Cat.* 1881, 17.) S. L. oblong, 9–10 in. long, 2½ in. broad, on long petioles, which are yellowish at the base and apex, ruby-red between. L.-blade green with a broad creamy-yellow central band, which spreads out along the bases of the lateral veins. The midrib of the older l. becomes bright ruby-red. [*Codiæum vittatum*. Year-book, 1882, 171.]

Croton Warreni. (*Williams' Cat.* 1880, 14.) S. L. pendent, twisted, linear, 25–30 in. long, 1–1½ in. broad, dark green, mottled and suffused with orange, yellow, and carmine, changing to rich carmine. [*Codiæum Warreni*, Year-book, 1881, 159.] Polynesia.

Croton Wigmannii. (*Williams' Cat.* 1883, 24.) S. L. 8–10 in. long by ½ in. broad, irregular in form, rich green, blotched with yellow. [*Codiæum Wigmannii*.]

Croton Williamsii. (*Bull Cat.* 1879, 4.) S. L. large with the course of the midrib and veins yellow, afterwards changing to deep crimson, while the whole plant becomes flushed with crimson and violet. [*Codiæum Williamsii*. Year-book, 1880, 148.]

Croton Wilsoni. (*Williams' Cat.* 1880, 15.) S. Somewhat resembling *C. Warreni*, but the l. are only 18–20 in. long, and of a bright green irregularly suffused with yellow. [*Codiæum Wilsoni*. Year-book, 1881, 160.] New Guinea.

Cryptanthus Beuckeri. (*B. H.* 1880, 241 ; 1881, 342, t. 17.) Bromeliaceæ. S. L. in an open rosette, petiolate, elliptic, acute or acuminate, spinulose-margined, of a light reddish tint, with numerous transverse green irregular lines or blotches. Fl. white, sessile in a central cluster. Brazil.

Cryptanthus morrenianus. (*G.H.* 1888, 157.) S. L. narrowed into a channelled petiole at the base, oblong-lanceolate, recurved : remotely spine-toothed, apex attenuate-cuspidate. Bracts slightly reddish, dusky tomentose on the back, overtopping the sessile head of yellowish fl. [Syn. *Distegranthus Moensi*, Makoy.] Brazil.

Cryptochilus lutea. (*G. C.* 1882, xvii. 733.) Orchidaceæ. S. Fl. urceolate, tridentate, light yellow, in a two-ranked raceme. The green ovaries are covered with white papillæ. India.

Cryptogramme acrostichoides. (*G. and F.* 1888, 341.) Filices. G. or H. H. Similar to *C. crispa*, but larger and stronger in growth; the barren segments thicker in texture, more prominently veined, and not so deeply cut; the fertile segments $\frac{3}{8}$–$\frac{1}{2}$ in. long. North America.

Cryptomeria japonica vars. **compacta, lycopodioides,** and **spiralis.** (*R. H.* 1885, 22.) Coniferæ. H. Three vars. differing in habit. The first-named forms a compact regular pyramid; the second is thick and bushy, and very regularly branched, the branchlets long and cord-like; the third is a short, much-branched, spreading shr., with a flattish or shortly conical top, and the l. arranged in a series of spirals. Japan.

Cryptomeria lycopodioides. (*R. H.* 1875, 300.) H. tree. A var. of *C. japonica*.

Cryptophoranthus maculatus. (*G. C.* 1887, ii. 693.) Orchidaceæ. G. With very short stems, elliptic obtuse fleshy l., $1\frac{1}{4}$-$2\frac{1}{4}$ in broad, spotted with purple, and numerous minute yellow fl. spotted with crimson; the sep. united at their base and apex. Brazil?

Cryptophoranthus minutus. (*K. B.* 1895, 5.) G. A minute species, less than 1 in. high; l. orbicular; fl. purple.

Cryptophoranthus oblongifolius. (*K. B.* 1895, 5.) G. Stem 2 in. long. L. 3 in.; peduncle short; fl. small, purple and yellow. South America.

Cryptostylis longifolia. (*G. C.* 1885, xxiii. 275, f. 53.) Orchidaceæ. G. Terrestrial orchid with a single lanceolate l., and a lax raceme of curiously-shaped fl. 1 in. broad. Sep. and pet. narrow, linear, yellowish-green. Lip hood-like, standing upwards, red, with reddish-brown markings. Australia.

Crysophila nana. (*B. T. O.* 1889, 337.) Palmæ. S. Dwarf palm, with roundish flabelliform l. Mexico.

Cucumis Sacleuxii. (*W. G.* 1890, 298.) Cucurbitaceæ. S. L. roundish reniform, lobed, rough and greyish-green on both sides. Fr. ovoid, 3–4 in. long, of a dark green with lighter green stripes, used for pickling. Zanzibar.

Cucumis sativus sikkimensis. (*B. M.* t. 6206.) G. annual. Resembling the ordinary cucumber but fr. ornamental, chocolate, beautifully reticulated with ochreous markings. Eastern Himalaya.

Cucumis Vilmorini. (*B. T. O.* 1894, 115.) H. H. An annual plant with cut l. The fruits are abundantly produced, are canary-yellow in colour and armed with soft spines.

Cucurbita andreana. (*R. H.* 1896, 542, f. 184-7.) Cucurbitaceæ. G. A species with long stems rooting at the nodes, large l. marbled with white, fl. only half the size of those of the common pumpkin, and obovoid fruit marked with white and yellow on a green ground. Uruguay.

Cucurbita maxima sylvestris. (*B. T. O.* 1893, 333.) Supposed to be the origin of all the large-fruited gourds in cultivation. The native country of *C. maxima* was unknown, but the present plant has been found wild in the Himalayan region. Fruit as large as a man's head.

Cucurbita mexicana. (*Dumm. Cat.* 1890–91, 42.) H. H. or S. climber, very similar to *C. melanosperma*, but with the l. of a different shape, and fl. of a different hue; the seeds are large and black. Mexico.

Cupania elegans. (*G. C.* 1893, xiii. 474.) Sapindaceæ. S. L. undulated and toothed at the edges.

Cupania grandidens. (*Bull Cat.* 1884, 12.) S. shr. with downy stems and imparipinnate l. Leaflets nine, oblong, acuminate, sinuately lobed, 3-4 in. long. Zanzibar.

Cuphea lanceolata. (*B. M.* t. 6412.) 6412.) Lythraceæ. H. H. annual. A strong-growing species, viscidly glandular-pubescent. L. petiolate, cordate-ovate, acutish. Fl. axillary, solitary, pedicillate, deflexed. Cal. about 1 in. long, purplish. Pet. six, the two dorsal ones very large and

orbicular, velvety, blackish-purple with a paler border, the four lower ones small, orbicular, purple. [Syn. *C. Zimapani*, Roezl.] Mexico.

Cuphea Roezlii. (*R. H.* 1877, 469.) G. per., 2–3 ft. high, bushy, viscous-hairy, very free-flowering. L. opposite, lanceolate, acuminate, attenuate at base. Fl. extremely abundant, in narrow racemose bracteate panicles; calyx ½ in. long, bright vermilion and orange, greenish at the tips; pet. vermilion, very small. Mexico.

Cupressus goweniana compacta. (*R. H.* 1896, S. f. 1.) Coniferæ. H. H. A form differing from the type in its dense compact pyramidal habit.

Cupressus lawsoniana stricta. (*B. T. O.* 1888, 230, f. 24.) H. Garden variety.

Cupressus macrocarpa lutea. (*Gard.* 1894, xlv. 33.) H. A well-marked form, entirely suffused with pale golden yellow.

Curculigo densa. (*Bull Cut.* 1885, 14.) Amaryllidaceæ. S. A pretty plant of dwarf habit, with oblong ovate acute plicate l., of a dark green with a silvery lustre. India.

Curcuma bakeriana. (*G. C.* 1892, xi. 682.) Scitamineæ. S. Allied to *C. australasica*, but with larger orange-coloured fl., and club-shaped tubers. New Guinea.

Curcuma Leopoldii. (*Lind. Cat.* 1883, 2.) S. per., having the aspect of a *Musa*, with lanceolate bright green l., striped with cream colour.

Curcuma luteo-viridis. (*Bull Cut.* 1882, 15.) S. tuberous per., with large oblong acute green l., with an oblique yellowish green variegation.

Curcuma sumatrana. (*G. C.* 1882. xviii. 393.) S tuberous per., with stalked broadly elliptic bright green l., and a dense spike of yellow fl., with very large deep orange-red bracts. Sumatra.

Curmeria Wallisii. (*G. C.* 1877, vii. 108, f. 16; *Bull Cut.* 1877, 4, t. 6.) Araceæ. S. per. of tufted habit. L. spreading, stalked, about 6 in. long and 3 in. broad, elliptic-oblong, shortly acuminate, slightly oblique, dark green with a white edge and blotched above with bright yellow. Spathe shortly stalked, 3–3½ in. long, convolute and inflated at base, open above, pale red covered with minute white spots. Spadix nearly as long as the spathe, the lower quarter female, the rest male. [*Homalomena Wallisii*, Regel, *B. M.* t. 6571.] Colombia.

Cusparia undulata. (*G. C.* 1892, xii. 396.) Rutaceæ. S. Shr. or small tree with unbranched stems and palmate l., not unlike an *Aralia*. Fl. white, in axillary racemes. Brazil.

Cyananthus lobatus. (*Gn.* t. 888; *B. M.* t. 6485.) Campanulaceæ. H. per. of dwarf habit, with pilose procumbent and ascending leafy stems, 6-8 in. long. Lobes of pinnatifid basal l. like the upper l. cuneate-obovate, lobate-dentate, glabrous, green. Fl. solitary, terminal, blue; calyx ½ in. long, urceolate, green, hairy; corolla 1 in. broad, tube a little longer than the calyx-limb: limb spreading, deeply 5-lobed; lobes elliptic, obtuse. Himalaya.

Cyanastrum cordifolium. (*G. and F.* 1894, 404.) Hæmodoraceæ. S. Root-stock creeping; l. cordate, 6 in. long, on stalks 9 in. long; fl. purple, stellate, 1 in. across, on short erect scapes. West Tropical Africa.

Cyanophyllum aspersum. (*G. C.* 1893, xiii. 475.) Melastomaceæ. S. L. more elongated than in *C. magnificum*, and coated with a most delicate down, which gives them a velvety texture.

Cyathea mastersiana. (*G. C.* 1894, xv. 663.) Filices. S. Remarkable for its thin stem, which is 2 ft. high, surmounted by graceful fronds 3–4 ft. long, the bases of which are spinous.

Cyathea microphylla. (*Fl. and P.* 1884, 9.) G. 3-4 ft. high. Fronds ovate, tripinnate, 2–3 ft. long, with small neat ovate-oblong deeply pinnatifid pinnules, which are smaller than in any other known species of *Cyathea*. Peruvian Andes.

Cyathea pubescens. (*Bull Cut.* 1879, 4.) S. Fronds ample tripinnate; stipes dark brown; pinnæ oblong, 2 3 ft. long; pinnules 6–9 in. long, with falcate blunt denticulate segments. Jamaica.

Cyathea pygmæa. (*G. C.* 1894, xv. 663.) S. Stem about 2 ft. high; fronds dull green.

Cyathea spinulosa. (*Bull Cat.* 1884, 12.) S. Stipes dark brown, spiny; rhachis muricate: fronds large, bipinnate, with the lobes of the pinnules oblong, acute, serrulate, glabrous. India.

Cycas Beddomei. (*G. C.* 1883, xx. 556; *Fl. and P.* 1883, 185.) Cycadaceæ. S. Stem short; l. 3 ft. long and 9 in. broad; petiole four angled, tomentose at the base: leaf-segments revolute, about $\frac{1}{8}$ in. wide. Male cone 13 in. long, 3 in. in diam., very shortly stalked. Scales tapering from an oblong deltoid base, basal ones erect, the others deflexed. India.

Cycas Bellefonti. (*Ill. H.* 1886, t. 586; *Cat. Comp. Cont. d'Hort.* 1886, 9.) S. L. ascending and gracefully arching, 5 to $5\frac{1}{2}$ ft. long: leaflets very numerous, linear-lanceolate, acuminate, entire. Tongking.

Cycas Duivenbodei. (*Cat. Comp. Cont. d'Hort.* 1886, 9.) S. Trunk spiny, covered with blackish-brown scales: l. pinnate 3-$3\frac{1}{2}$ ft. long, with crowded acuminate leaflets 1 in. broad. Moluccas.

Cycas Pluma. (*Bull Cat.* 1877, 4.) S. L. plume-like, bright green. Petiole and rhachis smooth: leaflets 4 in. long, linear, acute. Below them are a few pairs of short stiff deflexed spines. Madras.

Cycas siamensis. (*G. C.* 1878, 810; *Bull Cat.* 1879, 4.) S. Stout glabrescent oblong stock marked with circular furrows. L. 30 in. long by 8 in. broad, with about 65 pairs of pinnæ and one terminal segment: the lower 13 or 14 segments reduced to spines; middle segments 4 in. long, $\frac{1}{4}$ in. broad, diminishing in size towards apex and base of l., linear-lanceolate, abruptly spine-pointed, base decurrent along the puberulous rounded rhachis; mid-rib prominent on both sides. Cochin China; Siam.

Cycas undulata. (*Williams' Cat.* 1881, 24, 34.) S. L. arching, 3 ft. long: leaflets in 10-16 pairs, linear-lanceolate, acute, slightly wavy. Polynesia.

Cycas Wendlandii. (*Sand. Cat.* 1895, 32.) S. Somewhat resembling *Dioon* in habit, but differing in the leaflets, which are not serrated. Madagascar.

Cyclamen alpinum. (*Gfl.* 1892, 526.) Primulaceæ. H. alpine. A very dwarf form, with small l., marked with white, and purple-red fl., with a blackish eye. Asia Minor.

—— Var. **album.** (*Gfl.* 1892, 526.) H. White-flowered.

Cyclamen tauricum. (*Damm. Cat.* 1892, 4.) H. L. large, often marked with silvery grey. Fl. pure white. Probably both *C. alpinum* and *C. tauricum* are forms of *C. europæum* from high elevations. Taurus.

Cyclanthus discolor. (*Bull Cat.* 1882, 15; *Fl. and P.* 1882, 75.) Cyclanthaceæ. S. Evergreen per. with bifid l., which in the young state are variegated with tawny orange. The two segments of the l. are lanceolate, acuminate, curved, or more or less frilled at the edge. Colombia.

Cyclanthus godseffianus. (*G. C.* 1892, xi. 731.) S. Name only.

Cycnoches peruvianum. (*L.* vii. t. 301.) Orchidaceæ. S. Allied to *C. rostricaudum*, having a drooping raceme of pale green fl., spotted with purple-brown, and a white lip, cut into radiating clavate processes. Peru.

Cycnoches rossianum. (*G. C.* 1891, ix. 456.) S. Male fl. on slender racemes, $1\frac{1}{2}$ in. in diam., yellowish-green with brown spots: female fl. solitary, bright green, twice as large as the male.

Cycnoches versicolor. (*G. C.* 1888, iv. 596.) S. Raceme few-flowered. Sep. and pet. oblong, acute; the pet. a little the broader, dark green, with darker veins, changing to deep brown. Lip oblong, acute, convex, with an excavation near the base, having an erect tooth on each side, thick and fleshy, white, becoming yellowish, spotted on the apical part with purple. Brazil.

Cycnoches Warzewiczii. (*F. M.* t. 381; *G. C.* 1879, xii. 493, f. 78.) S. Fl. green. The female fl. are about 2 in. in diam., and have a short column and a cordate entire acute lip. The male fl. are in a long raceme, much smaller, with a long slender curved column, and lip cut into about nine radiating segments.

Cydonia vulgaris marmorata. (*Späth Cat.* 1889–90, 3.) Rosaceæ. H. shr. A garden var., having the l. variegated with white and yellow. [*Pyrus Cydonia*, L. var.]

Cymbidium affine. (*G. C.* 1878, x. 810; *F. M.* t. 346.) Orchidaceæ. G. Allied to *C. eburneum* and *C. Mastersii*, having a raceme of white fl. with a few purplish dots on the forepart of the lip. India.

Cymbidium albucæflorum. (*G. C.* 1889, vi. 406; *O.* 1889, 329.) S. [*C. madidum*, Lindl.]

Cymbidium armainvilliense. (*J. O.* 1894, 9.) G. A garden hybrid between *C. eburneum* and *C. lowianum*.

Cymbidium cochleare. (*G. C.* 1880. xiii. 168.) S. L. narrow. 2 ft. long. Sep. almost linear, the odd one a little galeate: both sides sepia-brown. Pet. long, linear, yellowish-green, with numerous small brown spots. Lip long, hooked, deltoid, deep orange, with numerous red spots. Side-lobes upright; middle sessile, triangular, wavy, with a narrow white border, Burma.

Cymbidium eburneo-lowianum. (*G. C.* 1889, v. 363; *L.* xiii. t. 578.) G. A garden hybrid with the habit of *C. eburneum*.

Cymbidium eburneum philbrickianum. (*G. C.* 1886, xxv. 585.) G. A white var. resembling *C. Parishii* in growth, with rather narrow sep. and pet., and the side lobes of the lip well apart from the narrower middle lobe: callus narrow, with an obscure mid-keel.

—— Var. **williamsianum.** (*G. C.* 1881. xv. 530.) G. Front lobe and tips of the side-lobes of the lip light purple, the front bar of the three keels light brown, having a little disk before it.

Cymbidium elegans obcordatum. (*G. C.* 1880, xiii. 41.) G. Fl. pale yellow; the front lobe of the lip white, obcordate, emarginate. [*Cyperorchis elegans*, Blume, var.] India.

Cymbidium ensifolium estriatum. (*Williams' Cat*, 1888, 20.) G. Perianth segments narrow. Sep. green with a few red lines. Pet. white, with purple lines. Front lobe of lip yellow, with a few brown spots, the rest white. Fl. sweetly scented. Assam.

Cymbidium giganteum lowianum. (*G. C.* 1877, vii. 685.) G. [*C. lowianum*, Reich. f.] Burma.

Cymbidium grandiflorum punctatum. (*L.* ix. t. 389; *J. O.* 1893. 76.) G. A var. with purplish spots on the lower parts of the flower-segments.

Cymbidium Humblotii. (*G. C.* 1892, xii. 8.) S. Foliage and habit of *C. giganteum*. Panicle branching, with numerous green and black fl., recalling *Cælogyne pandurata*. Madagascar.

Cymbidium leachianum. (*G. C.* 1878, x. 136.) S. L. linear-lanceolate, 2 ft. long, 2 in. broad. Fl. in loose racemes: sep. and pet. ligulate, acute, pale ochre with a brown median line: lip 3-lobed, brown with a whitish disk with two keels; column dark purple. Formosa.

Cymbidium Loise-Chauvieri. (*G. and F.* iii. 153.) S. A large scarlet-flowered form. Madagascar.

Cymbidium lowianum. (*G. C.* 1879, xi. 332, 403, f. 56; *F. M.* t. 353.) G. Near *C. giganteum*. Fl. large; sep. and pet. green, with a few faint brown lines or nerves. Lip cordate, flat, whitish-yellow with some purple spots at base, the disk of front lobe purple, becoming darker afterwards, with a narrow pale border. Two short abrupt purplish calli stand on the disk of the lip. [This was previously described as *C. giganteum*, Wall. var. *lowianum*, Reichb. f. in *G. C.* 1877, vii. 685.] Burma.

—— Var. **aureum.** (*G. C.* 1893, xiii. 682.) G. Fl. yellow, with a blotch of orange on the lip.

—— Var. **superbissimum.** (*L.* ix. t. 392.) G. Front lobe of the labellum coloured deep maroon purple.

—— Var. **viride.** (*G. C.* 1892, xi. 698.) G. Fl. greenish-yellow devoid of purple on the lip.

Cymbidium Lowio-eburneum. (*G. C.* 1896, xix. 337.) G. A garden hybrid between the species indicated in the name. The reverse cross (*eburneo-lowianum*) is known.

Cymbidium Mastersii. (*F. M.* t. 391; *G. C.* 1880, xiii. 136.) G. The typical form of the plant, with white fl., and several orange-red or purple spots on the lip. [*Cyperorchis Mastersii*, Benth.]

—— Var. **album.** (*R.* ser. 1, t. 66.) G. Fl. pure white except the keels, which are yellow. Assam. [*Cyperorchis Mastersii*, Benth. var. *alba*.]

Cymbidium Parishii. (*G. C.* 1878, x. 74; *W. O. A.* t. 25.) S. Sep. and pet. ivory-white; middle zone of lip, and disc of front lobe orange, spotted with purplish brown; side lobes with numerous spots of purplish-violet. Burma.

Cymbidium pulcherrimum. (*G. C.* 1891, x. 712.) S. L. grassy; scape stout, bearing about a dozen waxy white fl., striped and flushed with crimson. Northern India.

Cymbidium tracyanum. (*G. C.* 1890, viii. 718; *J. of H.* xxi. 1890, 535, 71.) G. A large flowered var. of *C. grandiflorum*, introduced amongst *C. lowianum*. [*C. hookerianum*, Reichb. f.]

Cymbidium winnianum. (*G. C.* 1892, xii. 566; *R.* ser. 2, t. 75.) G. A garden hybrid between *C. giganteum* and *C. eburneum*.

Cynanchum formosum. (*K. B.* 1895, 112.) Asclepiadaceæ. S. Climber with ovate l. 1–4 in. long and large axillary cymes of small greenish fl. Peru.

Cynanchum macrorhizon. (*R. H.* 1877, 435, f. 78–79.) G. or H. H. climber of vigorous habit, with opposite petiolate cordate cuspidate entire l., and stalked umbels of *Asclepias*-like fl. with a yellowish-green corolla, and white corona. Japan.

Cynorchis grandiflora. (*G. C.* 1893, xiii. 80, 197, 29; *O. R.* i. 59.) Orchidaceæ. S. A tuberous rooted terrestrial orchid, with ensiform annual l. and erect 1–2 flowered scapes 1 ft. long. Fl. 1½ in. across: sep. and pet. small, greenish with purple spots; lip large, four-lobed with a long spur, and coloured bright rose purple. Madagascar.

Cynosorchis elegans. (*G. C.* 1888, iii. 424; *H. G.* 1888, 279.) Orchidaceæ. S. A small terrestrial orchid, with light green oblong-lanceolate acute l., 2 in. long, ½ in. broad, striped and barred with purple beneath. Raceme with a few small white and rosy-tinted fl., marked with deep purple spots and lines on the 3-lobed lip; spur slender, shorter than the ovary. [*Cynorchis*.] Madagascar.

Cynosorchis lowiana. (*G. C.* 1888, iii. 424; *H. G.* 1888, 280.) S. A small terrestrial orchid, with cuneate-oblong acuminate l., about a span long, and nearly ¾ in broad, dark green. Scape slender, with a few small fl. Sep. and pet. whitish-green. Lip 4-lobed lilac, with an obcordate dark purple spot. [*Cynorchis*.] Madagascar.

Cypella brachypus. (*G. C.* 1876, v. 138.) Iridaceæ. S. per. closely allied to *C. northiana*. Rhizome erect, with 6–8 distichous ensiform l., 1½ ft. long, 1½ in. broad, bright green. Fl. 5–6 from the side of the leaf-like scape, 2–3 in. above its base, bright yellow, banded towards the bottom with red-brown. Stigmas petaloid, lemon yellow. Trinidad.

Cypella peruviana. (*B. M.* t. 6213.) S. or G. corm, with an erect stem, bearing 2–3 linear oblong-attenuate plicate glabrous l., and 2–3 large, fl.: outer segments large, roundish, with a cuneate claw: inner segments much smaller, panduriform, the limbs reflexed, the narrow convolute neck much arched and pilose on the face; rich yellow, lemon yellow at base, spotted with purple-brown, the smaller segments with a purple band along each side of the arched neck. Brazil.

Cyperorchis elegans. (*B. M.* t. 7007; *G. C.* 1888, iv. 15; *G. and F.* 1888, 300.) Orchidaceæ. G.

Cyperus aristatus. (*B. T. O.* 1893, 107, f. 14.) Cyperaceæ. G. An annual species hardly 6 in. high. Mexico.

Cyperus distans'spiraliformis. (*W. G.* 1888, 31.) H. Not described, but compared with *Juncus spiralis* as to habit.

Cyperus ferox. (*B. T. O.* 1895, 253.) G. A tall-growing species with very large infl. South Brazil.

Cyperus gracilis. (*R. H.* 1893, 391.) S. A form of *C. alternifolius variegatus*, with filiform stems and leaves.

Cyperus laxus variegatus. (*F. M.* t. 470.) S. or G. per. A var. of free growth, useful for decorative purposes. The linear-acuminate l. being beautifully striped with green and white.

Cyperus natalensis. (*G. and F.* iii. 469.) S. [*Mariscus Grantii*, C. B. Clarke in *Thiselton-Dyer Fl. Cap.* vii. (1898) 194.]

Cyperus reflexus. (*B. T. C.* 1895, 253.) G. L. light green densely tufted. Although a perennial it flowers in its first year. Argentina.

Cyphia tortilis. (*K. B.* 1894, 356.) Campanulaceæ. G. Allied to *C. sylvatica*. Tubers succulent. edible; stem climbing: l. spathulate or lanceolate, 1 in. long; fl. axillary, small, lilac. South Africa.

Cyphokentia robusta. (*Ill. H.* 1879. t. 339; *Lind. Cat.* 1878, 4.) Palmæ. S. palm of robust habit with pinnate l.; rhachis dark brown; pinnules lanceolate-acuminate, flat, dark green. New Caledonia.

Cyphomandra argentea. (*Bull Cat.* 1880, 3.) Solanaceæ. S. L. elliptic, 8 or 10 in. long and 5 in. broad, of a bright silvery tint, with transverse green veins; under side glossy, stained with purple. Brazil.

Cypripedium Adrastus. (*G. C.* 1892, xi. 343.) Orchidaceæ. S. A garden hybrid between *C. Boxallii* and *C. leeanum*.

Cypripedium Æson. (*G. C.* 1893, xiii. 80.) S. A garden hybrid between *C. Drurii* and *C. insigne*.

Cypripedium Ainsworthii. (*G. C.* 1879, xi. 748.) S. A garden hybrid between *C. Sedeni* and *C. Roezlii*.

Cypripedium albertianum. (*G. C.* 1892, xii. 672.) S. A garden hybrid between *C. spicerianum* and *C. insigne Wallacei*.

Cypripedium albo-purpureum. (*G. C.* 1877, viii. 38.) S. A garden hybrid between *C. dominyanum* and *C. Schlimii*.

Cypripedium album. (*G. C.* 1887, i. 512.) S. Garden hybrid.

Cypripedium Alfredi. (*G. C.* 1890, viii. 294.) S. A hybrid between *C. venustum* and *C. lævigatum*.

Cypripedium allanianum. (*O. R.* 1894, 22.) S. A garden hybrid between *C. spicerianum* and *C. Curtisii*.

Cypripedium amabile. (*R. H.* 1891, 496, t.) S. A garden hybrid between *C. javanico-superbiens* and *C. Hookeræ*.

Cypripedium amandum. (*G. C.* 1887. i. 174; *Bull Cat.* 1887, 10.) S. Garden hybrid.

Cypripedium amesianum. (*Williams' Cat.* 1887, 22; *W. O. A.* t. 340.) S. Garden hybrid.

Cypripedium Aphrodite. (*Veitch Man. Cypr.* 76.) S. A garden hybrid between *C. niveum* and *C. lawrenceanum*.

Cypripedium apiculatum. (*G. C.* 1886, xxv. 617.) S. A garden hybrid between *C. barbatum* and *C. Boxallii*.

Cypripedium appletonianum. (*Gard.* xliii. 95; *O. R.* i. 135.) S. Said to be only a variety of *C. hullenianum*, with paler coloured fl. and l. bright green, reticulated with dark green.

Cypripedium Argo-Stonei. (*G. C.* 1896, xx. 554.) S. A garden hybrid between the two species indicated by the name.

Cypripedium Argus Moensii. (*Veitch Man. Cypr.* 11.) S. [*C. moensianum*, Lind.]

Cypripedium Arnoldiæ. (*G. C.* 1894, xvi. 378.) S. A garden hybrid between *C. bellatulum* and *C. superciliare*.

Cypripedium arnoldianum. (*G. C.* 1890, viii. 632.) S. A hybrid between *C. Veitchii* and *C. concolor*.

Cypripedium arthurianum pallidum. (*L.* iii. t. 121.) S. Garden hybrid

Cypripedium Ashburtoniæ expansum. (*G. C.* 1884, xxii. 552.) S. Upper sep. broad, having a large ivory-white crescent-like zone from the top along the margin to the middle, where are numerous brownish-black nerves covered with distant dark blotches, on a green ground. Pet. and l. broader than in the type.

Cypripedium Ashburtoniæ majus. (*Veitch Man. Cypr.* 79.) S. A garden hybrid between *C. barbatum Crossii* and *C. insigne*.

—— Var. **superbum**. (*Williams' Cat.* 1889, 23.) S. Garden hybrid between *C. barbatum superbum* and *C. insigne*.

Cypripedium Ashtoni. (*G. C.* 1895, xviii. 721.) S. A garden hybrid between *C. ciliolare superbum* and *C. selligerum majus*.

Cypripedium Aylingii. (*J. of H.* 1890, xx. 480, f. 74; *G. C.* 1890, vii. 792.) S. A garden hybrid between *C. niveum* and *C. ciliolare*.

Cypripedium Baconis. (*G. C.* 1892, xi. 171.) S. A garden hybrid between *C. chlorops* and *C. Schlimii*.

Cypripedium barbato-veitchianum. (*L.* vi. t. 288.) S. A garden hybrid between *C. barbatum* and *C. superbiens*.

Cypripedium Barteti. (*G. C.* 1886, xxv. 532; *R. H.* 1886, 84.) S. A hybrid between *C. barbatum* and *C. Chantini*, raised from the same seed pod as *C. Laforcadei*.

Cypripedium beechense. (*G. C.* 1894, xv. 762.) S. A garden hybrid between *C. Curtisii* and *C. superbiens*.

Cypripedium behrensianum. (*O. R.* 1894, 111.) S. A garden hybrid between *C. Boxallii* and *C. Io-grande*.

Cypripedium bellatulum. (*G. C.* 1888, iii. 648, 747, f. 99; iv. 215; *L.* iv. t. 149. S. A large-flowered form of *C. Godefroyæ*, with large spots.

—— Var. **album.** (*G. C.* 1895, xvii. 748; *O. R.* 1895, 207.) S. A var. with pure white fl. and green l.

—— Var. **egregium**, (*G. C.* 1888, iv. 122; *H. G.* 1888, 456.) S. A form with a short nearly trilobed sep. and light purple spots on the flower.

—— Var. **luteopurpureum.** (*G. C.* 1893, xiv. 179.) S. A var. with a yellowish fl. blotched with purple.

Cypripedium berggrenianum. (*G. C.* 1888, iii. 798; *H. G.* 1888, 396.) S. Garden hybrid.

Cypripedium bolerlaerianum. (*G. C.* 1895, xviii. 391.) S. A garden hybrid between *C. Dautheri* and *C. harrisianum*.

Cypripedium bosscherianum. (*G. C.* 1892, xi. 11.) S. A mistake for *C. deboscherianum*.

Cypripedium Boxallii. (*G. C.* 1877, vii. 367.) S. Similar to *C. villosum*. Peduncle covered with dark blotches. Bract ample, broad. Sep. obtuse, with very broad bases. Pet. scarcely cuneate at base. Lip with short lateral horns. Staminode narrow at its base. India.

Cypripedium bragaianum. (*L.* vii. t. 279.) S. A garden hybrid between *C. hirsutissimum cæruleseens* and *C. Boxallii atratum*.

Cypripedium Browni. (*G. C.* 1891, x. 49.) S. A hybrid between *C. magnificum* and *C. leucorrhodum*.

Cypripedium Bryani. (*G. C.* 1892, xii. 138.) S. A garden hybrid between *C. Argus* and *C. philippinense*.

Cypripedium buchanianum. (*Gard.* 1889, xxxv. 8.) S. A garden hybrid between *C. Drurii* and *C. spicerianum*.

Cypripedium bullenianum anophthalmum. (*G. C.* 1884, xxi. 174.) S. A var. without eye-spots on the petals or on the brown area under the green mouth of the lip.

—— Var. **oculatum.** (*G. C.* 1881, xv. 563.) S. Pet. having a mauve disk at the top, and some large dark brown eye-spots on their wavy margins. The stalk of the lip is light ochre with numerous brown spots and bars; the shoe is dark brownish with a narrow green margin. Borneo.

Cypripedium Burbidgei. (*G. C.* 1881, xvi. 38.) S. In the way of *C. javanicum*, but distinguished by the staminode, which is quite abrupt in front, with three very obscure teeth. Upper sep. nearly triangular, with nine green nerves. Pet. light green, with a row of most obscure dark warts on each side, and one on the middle line; margins of the lip mauve. Borneo.

Cypripedium burfordiense. (*G. C.* 1888, iv. 724.) S. Garden hybrid.

Cypripedium Burtonii. (*G. C.* 1895. xvii. 801.) S. A garden hybrid from the same parents as *C. Millmani*, viz. *C. lawrenceanum* and *C. philippinense.*

Cypripedium calanthum. (*G. C.* 1880, xiv. 652.) S. A garden hybrid between *C. barbatum bifforum* and *C. Lawei.*

Cypripedium Calceolus × macranthon. (*G. C.* 1892, xi. 394.) H. A supposed natural hybrid imported from the birch forests of Western Siberia.

Cypripedium californicum. (*B. M.* t. 7188.) H. A small-flowered species. Stem 1–2 ft. high; l. broadly ovate, nerved: fl. small: sep. dull yellow; lip white spotted with pale brown. Closely allied to *C. passerinum.* Inhabiting damp woods in the northern parts of California.

Cypripedium caligare. (*G. C.* 1888. iii. 264; *H. G.* 1888, 226: *O.* 1888. 130.) S. Garden hybrid.

Cypripedium calloso-Argus. (*O. R.* 1894, 110.) S. A garden hybrid between the two species indicated by the name.

Cypripedium calloso-niveum. (*O. R.* 1895, 359.) S. A garden hybrid between the two species indicated in the name.

Cypripedium callosum. (*G. C.* 1886. xxvi. 326.) S. Something in the way of *C. Argus*, with a very large transversely elliptic acute dorsal sep., white, washed with purple and having numerous green nerves. Lower sep. half as long as the lip, ligulate, acute. Pet. ligulate, pendulous, green, purple on the top, ciliate, and marked with black shining warts on the margins and disk. Lip like that of *C. superbiens.* Staminode reddish, marbled with green. Siam.

—— Var. **Sanderæ.** (*G. C.* 1894, xv. 663; *O. R.* 1894, 197.) S. A pale coloured var.; the dorsal sep. snow-white with a few lines of emerald green at the base.

—— Var. **sublæve.** (*G. C.* 1888, iii. 331; *H. G.* 1888, 228.) S. A var. without any spots on the disk of the petals.

Cypripedium calophyllum. (*G. C.* 1881, xv. 169.) S. A garden hybrid between *C. barbatum* and *C. venustum.*

Cypripedium calurum. (*G. C.* 1881, xv. 41.) S. Garden hybrid between *C. longifolium* and *C. Sedeni.*

Cypripedium Canhami. (*W. G.* 1888, 32.) S. Garden hybrid.

Cypripedium cannartianum. (*L.* iii. 93, 141.) S. A var. of *C. philippinense*, with 3 sep.; the lower sep. being 2-lobed, or the two component seps. being fully developed. [Syn. *C. Roebelenii.* Reichb. f. var. *cannartianum*, Linden.]

Cypripedium cardinale. (*G. C.* 1882, xviii. 488.) S. A hybrid between *C. Sedeni* and *C. Schlimii.*

Cypripedium carnusianum. (*G. C.* 1895, xviii. 102.) S. A garden hybrid between *C. spicerianum* and *C. haynaldianum.*

Cypripedium castleanum. (*G. C.* 1890, viii. 702; ix. 39.) S. A hybrid between *C. hirsutissimum* and *C. superbiens.*

Cypripedium chamberlainianum. (*G. C.* 1892, xi. 234, f. 34.) S. Habit of *C. superbiens.* L. strap shaped. Scapes 2 ft. high, bearing large boat-shaped bracts and numerous fl. Fl. rosy-purple and white; in form they are not unlike those of *C. spectabile.* New Guinea.

—— Var. **excellens.** (*G. C.* 1892, xi. 700.) S. A var. with a pale dorsal sep.

Cypripedium Chapmani. (*G. C.* 1896. xx. 667.) S. A garden hybrid between *C. Curtisii* and *C. bellatulum.*

Cypripedium Charlesworthii. (*G. C.* 1893, xiv. 406, 437, f. 70; *O. R.* i. 303; *B. M.* t. 7416.) S. Closely allied to *C. spicerianum*, which it resembles in l. and in size and form of fl., differing mainly in colour; the dorsal sep. is white, veined and shaded with rosy purple; pet. and lip yellowish, tinged with brown; staminode white.

—— Var. **unicolor.** (*G. C.* 1895, xviii. 248.) S. A form in which the colour of the lip is the same as the pet. and sep. instead of brown as in the type.

Cypripedium chelseense. (*G. C.* 1888, iv. 406.) S. Garden hybrid.

Cypripedium chlor neurum. (*G. C.* 1880, xiv. 525; *W. O. A.* t. 37.) S. Garden hybrid.

Cypripedium chlorops. (*G. C.* 1888, iii. 584; *H. G.* 1888, 308.) S. Garden hybrid. [Syn. *Selenipedium chlorops*, Reihb. f.]

Cypripedium Chrysocomes. (*G. C.* 1892, xi. 781.) S. A garden hybrid between *C. caudatum roseum*, and *C. conchiferum*.

Cypripedium ciliolare. (*G. C.* 1882, xviii. 488.) S. Very like *C. superbiens*, and probably only a slight form of it, the sep and pet. having more numerous nerves, and more hairy margins: the nail of the lip is shorter, and the staminode lower and broader. Philippines.

—— Var. **miteauanum.** (*L.* iv. t. 146.) S. A var. having the whole fl., except the lower sep., suffused with a rich purple hue. [Syn. *C. miteauanum*, Linden & Rod.] Philippines.

Cypripedium claptoniense. (*G. C.* 1889, v. 168.) S. Raised from *C. harrisianum* and *C. villosum*.

Cypripedium Claudii. (*L.* ix. t. 397.) S. A garden hybrid between *C. spicerianum* and *C. vernixium*.

Cypripedium clinkaberryanum. (*G. C.* 1893, xiv. 86, f. 18.) S. A garden hybrid between *C. philippinense* and *C. Curtisii*.

Cypripedium conchiferum. (*G. C.* 1881, xv. 330.) S. Garden hybrid between *C. Pearcei* and *C. Roezlii*.

Cypripedium concinnum. (*Bull Cut.* 1887, 10.) S. Garden hybrid.

Cypripedium conco-callosum. (*O. R.* 1895, 15.) S. A garden hybrid between *C. concolor* and *C. callosum*.

Cypripedium conco-lawre. (*J. of H.* 1893, xxvi. 193, f. 41.) S. A garden hybrid between *C. concolor* and *C. lawrencianum*.

Cypripedium concolor chlorophyllum. (*G. C.* 1886, xxvi. 294.) S. L. free from any marbling: fl. covered with small spots.

Cypripedium concolor longipetalum. (*O. R.* 1896, 54.) S. A var. with pet. 2½ in. long.

—— Var. **Reynieri.** (*G. C.* 1886, xxv. 362.) S. A var. with large marbled l. and yellow fl. with a purple blotch on the outside of the sep.; the staminode is ochre spotted with purple, and has a white margin in front. Cambodia.

—— Var. **striatum.** (*G. C.* 1893, xiii. 596.) S. A var. with narrow segments lined with purple, the lip dotted with purple. Mergui, Burma.

—— Var. **sulphurinum.** (*G. C.* 1888, iv. 264; *H. G.* 1888, 504.) S. A green-leaved var., with light sulphur-coloured fl. without spots, but with two darker yellow marks on the staminode.

—— Var. **tonkinense.** (*L.* ii. t. 77; *G. C.* 1887, i. 486.) S. This is a two-flowered form with rather larger fl. [Syn. *C. tonkinense*, Linden.] Tong-king.

Cypripedium conspicuum, and var. **pictum.** (*G. C.* 1888, iii. 521; *H. G.* 1888, 281.) S. Garden hybrids.

Cypripedium constableanum. (*G.* xliii. 75.) S. A garden hybrid between *C. fairieanum* and *C. dayanum*.

Cypripedium corbeillense. (*R. H.* 1893, 250.) S. A cross between *C. Bulleni* and *C. insigne*.

Cypripedium Corndeanii. (*G. C.* 1895, xvii. 627; *O. R.* 1895, 215.) S. A garden hybrid supposed to be between *C. lawrenceanum* and *C. Sedeni*.

Cypripedium corningianum. (*G. M.* 1891, 495.) S. A hybrid between *C. superbiens* and *C. philippinense*.

Cypripedium cowleyanum. (*G. C.* 1892, xi. 72.) S. A garden hybrid between *C. Curtisii* and *C. niveum*.

Cypripedium crossianum psittacinum. (*G. C.* 1889, v. 9.) S. Raised from *C. insigne Maulei* and *C. venustum spectabile*.

—— Var. **tautzianum.** (*G. C.* 1889, v. 43.) S.

Cypripedium Curtisii. (*G. C.* 1883, xx. 8; *W. O. A.* t. 122.) S. Very near *C. ciliolare*, and perhaps only a var. of that species; l. broader, more acute, darker, with darker marks; pet. narrower, with shorter cilia, and smaller spots, numerous at the top; lip large, with acute side angles. Sumatra.

—— Var. **pallidum.** (*O. R.* 1895, 288.) S. A pale-coloured var.

Cypripedium Daisyæ. (*G. C.* 1892, xii. 331; *G. and F.* v. 460, f. 79.) S. A garden hybrid between *C. Lowii* and *C. amanthum superbum*.

Cypripedium Dallemagnei. (*L.* ix. t. 411.) S. A garden hybrid between *C. spiceriannm* and *C. lowianum*.

Cypripedium Dauthieri. (*R. H.* 1885, 157.) S. Garden hybrid.

—— Var. **rossianum.** (*G. C.* 1888, iii. 425; *H. G.* 1888, 280; *B. T. O.* 1888, 136.) S. Garden hybrid.

Cypripedium daviesianum. (*G. C.* 1895, xvii. 82.) S. A garden hybrid between *C. Boxallii atratum* and *C. Argus*.

Cypripedium deboisianum. (*G. C.* 1890, viii. 747.) S. A hybrid between *C. venustum* and *C. Boxallii atratum*.

Cypripedium debosscherianum. (*R. H. B.* 1892, 6.) S. A garden hybrid between *C. spiceriannm* and *C. barbatum superbum*.

Cypripedium decorum. (*R. H. B.* 1892, 6.) S. A hybrid between *C. Sallieri hyeanum* and *C. laurenciannm*.

Cypripedium delicatulum. (*G. C.* 1887, ii. 552.) S. Garden hybrid.

Cypripedium denisianum. (*G. C.* 1894, xvi. 118: *L.* x. t. 437.) S. A garden hybrid between *C. selligerum* and *C. superbiens*.

Cypripedium desboisianum. (*L.* vi. t. 277.) S. A garden hybrid between *C. venustum* and *C. Boxallii atratum*.

Cypripedium dilectum. (*G. C.* 1888, iii. 330: *H. G.* 1888, 228.) S. Intermediate between *C. Boxallii* and *C. hirsutissimum*. Upper sep. light green, with rows of blackish-purple spots, and a white apical margin. Pet. broadest at the apex. Mid line blackish, the part above it purple-mauve, the part below it green, with obscure reticulations: the base is spotted with black. Lip yellowish-green, spotted inside with blackish-purple. Staminode narrower than in *C. Boxallii*, 3-lobed at the apex. Ovary densely hairy, equalling the bract.

Cypripedium discolor. (*G. C.* 1882, xvii. 218.) A garden hybrid.

Cypripedium doliare. (*G. C.* 1887, i. 447.) S. Garden hybrid.

Cypripedium donatianum. (*B. T. O.* 1895, 79.) S. A garden hybrid, the parents of which are not given.

Cypripedium Drurii. (*G. C.* 1876, vi. 68; *L.* i. t. 6; *G. C.* 1885, xxiii. 472, f. 83.) S. In the way of *C. insigne*. L. ligulate, acute, very faintly spotted. Peduncle 1-flowered, purplish-brown; bract shorter than ovary. Sep. and pet. greenish-yellow, the sep. covered outside with dark hairs: upper sep. and pet. with 1 broad black line, lower sep. with 2 narrow black lines; the pet. with groups of small dark brown spots and numerous dark glandular hairs towards the base. Lip ochre-brown with numerous darker spots on its channelled base. India.

Cypripedium Edithæ. (*G. C.* 1892, xii. 458.) S. A garden hybrid between *C. concolorum* and *C. Schlimii*.

Cypripedium Edwardii. (*G. C.* 1893, xiv. 132.) S. A garden hybrid between *C. fairieanum* and *C. superbiens*.

Cypripedium elliottianum. (*G. C.* 1888, iv. 501, 532, 556, f.; *W. O. A.* t. 397.) S. Of the same group as *C. Stonei* and *C. rothschildianum*. L. 12–15 in. long, 1½–2 in. broad, bright green. Scape 1 ft. or more high, 2–5-flowered. Upper sep. elliptic, acute, flat, white, with dark purple-brown stripes. Lower sep. broadly ovate, coloured like the upper sep. Lip similar to that of *C. Stonei*, rosy-tinted. Pet. 5–6 in. long, broadly linear at base, tapering into narrow tails, white, spotted with chocolate. Staminode linear, bifid at apex, bent downwards. Philippines.

Cypripedium enfieldense. (*O. R.* i. 309.) S. A garden hybrid between *C. Hookeræ measuresianum* and *C. lawrenceanum*.

Cypripedium Engelhardtæ. (*L.* vi. t. 285.) S. A garden hybrid between *C. insigne Maulei* and *C. spicerianum.*

Cypripedium excellens. (*O. R.* 1894, 275.) S. A garden hybrid between *C. rothschildianum* and *C. harrisianum.*

Cypripedium Exul. (*G. C.* 1892, xi. 522, f. 77; *L.* vii. t. 327.) S. Described as a var. of *C. insigne.* It is not unlike *C. Drurii*, but the fl. are coloured like those of *C. insigne.* [Syn. *C. insigne*, Wall. var. *Exul*, Ridley; *C. insigne*, Wall. var. *siamense*, Hort.]

—— Var. **imschootianum.** (*L.* vii. t. 327.) S. A var. with a narrower white border to the dorsal sep. and narrower pet. with white tips. Siam.

Cypripedium eyermanianum. (*G. C.* 1890, viii. 746; *R.* ser. 2, t. 38.) S. A hybrid between *C. barbatum* and *C. spicerianum.*

—— Var. **Diana.** (*O. R.* i. 309.) S. A garden hybrid between *C. barbatum superbum* and *C. spicerianum.*

Cypripedium fairieano-lawrencianum. (*G. M.* 1893, 728, f.) S. A garden hybrid between the two species indicated by the name.

Cypripedium fasciculatum. (*G. and F.* 1888, 90, f. 16; *B. M.* t. 7275.) H. A small-flowered species, 3–12 in. high, with a pair of ovate or broadly-elliptic l., and a 1–4-flowered spike of fl. about 1–1½ in. in diam. Sep. and pet. lanceolate, acute, greenish. Lip 4–5 in. long, greenish-yellow, with a purple-brown margin. North-west America.

Cypripedium fascinatum. (*G. C.* 1893, xiv. 756; *R. H. B.* 1894, 25, f.) S. A garden hybrid between *C. spicerianum* and *C. hirsutissimum.*

Cypripedium festum. (*Gard.* 1892, xli. 26.) S. A garden hybrid between *C. barbatum* and *C. chloroneurum.*

Cypripedium fitchianum. (*W. O. A.* t. 350; *Williams' Cat.* 1888, 20; *G. C.* 1888, iv. 600.) S. Garden hybrid.

Cypripedium fordianum. (*G. C.* 1895, xvii. 210.) S. A garden hybrid between *C. Stonei* and *C. callosum.*

Cypripedium fowlerianum. (*G. C.* 1895, xvii. 337.) S. A garden hybrid between *C. harrisianum superbum* and *C. bellatulum.*

Cypripedium Fraseri. (*L.* vi. t. 253.) S. A garden hybrid between *C. hirsutissimum* and probably *C. barbatum.*

Cypripedium gemmiferum. (*G. C.* 1881, xv. 814.) S. A garden hybrid between *C. Hookeræ* and *C. purpuratum.*

Cypripedium germinyanum. (*G. C.* 1886, xxv. 200; *J. of H.* xxvi. 67.) S. A garden hybrid between *C. villosum* and *C. hirsutissimum.*

Cypripedium gibezianum. (*L.* ix. t. 425.) S. A garden hybrid between *C. villosum* and *C. venustum.*

Cypripedium Gigas. (*G. C.* 1892, xi. 136.) S. A garden hybrid between *C. lawrencianum* and *C. harrisianum.*

Cypripedium gloriosum. (*O. R.* 1894, 365.) S. A garden hybrid between *C. insigne Chantini* and *C. Io grande.*

Cypripedium Godefroyæ. (*G. C.* 1884, xxi. 146; *Veitch Cat.* 1884, 13, 18; *Fl. and P.* 1884, 38, f.; *B. M.* t. 6876.) S. Intermediate between *C. niveum* and *C. concolor*, with white fl. spotted with chocolate spots, having a lip like *C. concolor.* Siam.

—— Var. **hemixanthinum.** (*G. C.* 1885, xxiv. 70.) S. A var. with sulphur-coloured sep.

—— Var. **Laingi.** (*O.* 1890, 129.) S. A var. with small fl., the upper sep. very short and broad, the lower sep. small, and almost orbicular, and the pet. narrowly elliptic or oblong, colours similar to the type.

—— Var. **leucochilum.** (*O. R.* 1894, 145; *G. C.* 1894, xv. 717; *L.* viii. t. 341.) S. A var. with spotted sep. and pet. and a pure white lip.

—— Var. **luteum.** (*G. C.* 1891, x 393; *Gfl.* 1891, 642.) S. Differs from the type in the ground colour of the fl. being yellow instead of white, and the spots pale rosy-lilac.

—— Var. **Mariæ.** (*R. H. B.* 1889, 97, t.) S. Form with very large fl. having the lateral sep. notched at the apex.

Cypripedium godseffianum. (*G. C.* 1888, iii. 296; *O.* 1888, 133; *R. H. B* 1892, 85, f.) S. Garden hybrid.

Cypripedium goultenianum. (*Sand. Cat.* 1896, 23.) S. A garden hybrid between *C. Curtisii* and *C. callosum*.

Cypripedium Goweri magnificum. (*G. C.* 1895, xvii. 529.) S. A garden hybrid between *C. lawrenceanum* and *C. Curtisii*.

Cypripedium grande. (*G. C.* 1881, xv. 462; *R. H. B.* 1898, 27, f.) S. Garden hybrid between *C. Roezlii* and *C. Warscewiczii* (?)

Cypripedium Gravesiæ. (*G. C.* 1894, xv. 298, f. 34.) S. A garden hybrid between *C. Argus* and *C. niveum*.

Cypripedium greyanum. (*G. C.* 1893, xiii. 396.) S. A garden hybrid between *C. ciliolare* and *C. Drurii*.

Cypripedium harrisianum polychromum. (*L.* iv. t. 166.) S. Garden hybrid.

—— Var. **superbum.** (*L.* iii. t. 118; *G. C.* 1888, iii. 235.) S. Garden hybrid.

—— Var. **virescens.** (*O. R.* 1894, 235.) S. Differs from the type in having yellowish-green fl. without any purple-brown markings.

Cypripedium haynaldianum. (*B. M.* t. 6296; *G. C.* 1877, vii. 272.) S. Near *C. Lowei*, differing as follows:—Staminode narrower, bilobed, the lobes contiguous, bent down and quite covering a small tooth between them. Side lobes of the lip more prominent, and in their sinus with the channelled nail bearing one small entire keel. Stigma blunt, pentagonal, straight. Lower sep. broader and shorter, pale green with some brown spots. Upper sep. white at the tip, pale green with large brown spots on the lower part, and the borders broadly violet. Philippines.

Cypripedium hincksianum. (*G. C.* 1878, ix. 202.) S. epiphyte, remarkable for its long narrow lip. Sep. whitish-green with darker nerves; pet. light greenish, with a deep greenish middle line and brown border at base, tails brown; tip green, with small brown spots near the base. Darien, Colombia.

Cypripedium Hookeræ volonteanum. (*G. C.* 1890, viii. 66.) S. L. narrower, pet. broader and more obtuse than in the typical form. Borneo.

Cypripedium Horneri. (*O. R.* 1894, 89.) S. A garden hybrid between *C. Boxallii* and *C. Argus*.

Cypripedium hornianum. (*G. C.* 1887, ii. 428.) S. Garden hybrid.

Cypripedium houtteanum. (*G. C.* 1888, iii. 561.) S. [*C. vanhoutteanum.*]

Cypripedium hurrellianum. (*O. R.* 1895, 15.) S. A garden hybrid between *C. Argus* and *C. Curtisii*.

Cypripedium insigne albens. (*G. C.* 1893, xiv. 536.) G. Fl. yellow and white, with scarcely any of the brown markings of the type.

—— Var. **albo-marginatum.** (*L.* xi. t. 510; *W. O. A.* t. 232.) G. Dorsal sep. yellowish green with a very broad white margin, spotted on the green part with brown. Pet. tawny yellow with darker veins. Lip pale brown, yellow inside.

—— Var. **aureum.** (*Fl. and P.* 1882, 75.) G. A var. with yellow-tinted fl.

—— Var. **Chantini.** (*R. H.* 1878, 130.) G. This is the var. *Maulei* re-described and figured under a new name.

—— Var. **citrinum.** (*G. C.* 1895, xvii. 39.) G. A var. with lemon-yellow segments.

—— Var. **Clarkei.** (*G. C.* 1893, xiv. 537.) G. A var. with only a few spots on the dorsal sep.

—— Var. **Ernestii.** (*G. C.* 1893, xiv. 630.) G. A var. with pale-coloured fl., not unlike that called *Sanderæ*.

—— Var. **Gortoni.** (*G. C.* 1894, xvi. 336.) G. Peculiar in having no brown markings in the fl.

—— Var. **halleanum.** (*G. C.* 1889, v. 168.) G. Differs from other forms of this species in having the pet. covered with numerous dots of chocolate brown.

—— Var. **horsmanianum.** (*G. C.* 1888, iv. 693.) G. Var. with narrow fl., and a beak on the margin of the lip.

—— Var. **illustre.** (*G. C.* 1893, xiv. 692.) G. A var. with fl. of a clearer yellow hue than usual.

Cypripedium insigne latimaculatum. (*L.* xi. t. 510.) G. Upper sepal yellow with a few brown spots and a white margin; lip and wings yellow.

—— Var. **longisepalum.** (*G. C.* 1890, viii. 702; ix. 72.) G. A pale-flowered var. with the sep. slightly longer than in the type.

—— Var. **Luciani.** (*L.* xi. t. 505; *Ill. H.* 1896, t. 49.) G. A form with yellow lip and pet.; upper sep. broadly margined with white.

—— Var. **lucidum.** (*L.* xi. t. 510.) G. Upper sep. dark green with irregular purple spots and a white margin; lip brown.

—— Var. **Macfarlanei.** (*G. C.* 1890, viii. 655.) G. Fl. soft bright yellow, dorsal sep. with a white margin, and without the brown spots of the type.

—— Var. **miniatum.** (*L.* xi. t. 510.) G. Upper sep. yellow with maroon spots and a white margin; lip brown.

—— Var. **montanum.** (*L.* ix. t. 414.) G. This name has been given to a series of forms of *C. insigne*, some of which are distinguished by their narrower shorter l. and richly marked fl.

—— Var. **mooreanum.** (*Williams' Cat.* 1887, 22.) G. Garden variety.

—— Var. **moortebeekiense.** (*L.* xi. t. 510.) G. Upper sep. yellow with light maroon spots and a white margin; lip yellow.

—— Var. **rubidum.** (*L.* xi. t. 510.) G. Upper sep. pale green with regular purple spots and white margin; lip dark yellow.

—— Var. **Sanderæ.** (*G. C.* 1888, iv. 656, 692.) G. A var. with clear citron yellow wax-like shining fl., having the apical third of the upper sep. white and a few brown dots along the central nerve.

Cypripedium Io-spicereanum. (*O. R.* 1894, 143.) S. A garden hybrid between the plants indicated by the name.

Cypripedium irapeanum. (*Ill. H.* 1879, 128.) S. Large yellow fl. Cultivated in this country half a century ago, but apparently soon lost. See *Botanical Register*, 1846, t. 58. Mexico.

Cypripedium javanico-spicerianum. (*O.* 1891, 287.) S. A garden hybrid between *C. javanicum* and *C. spicerianum*.

Cypripedium johnsonianum. (*G. C.* 1892, xii. 744.) S. A garden hybrid between *C. nitens magnificum* and *C. lawrenceanum*.

Cypripedium kimballianum. (*G. C.* 1895, xvii. 800, f. 125; xviii. 154, 265, 292.) S. Supposed to be a garden hybrid between *C. rothschildianum* and *C. dayanum*.

Cypripedium Laforcadei. (*G. C.* 1886, xxv. 532; *R. H.* 1885, 107.) S. A hybrid between *C. barbatum* and *C. Chantini*, raised from the same seed pod as *C. Barteti*.

Cypripedium lathamianum. (*G. C.* 1888, iii. 360; *H. G.* 1888, 228.) S. Garden hybrid.

—— Var. **inversum.** (*R.* ser. 2, l. t. 10.)

Cypripedium Lauræ. (*O. R.* 1894, 80.) S. A garden hybrid between *C. villosum* and *C. superciliare*.

Cypripedium lawrebellum (*G. C.* 1892, xi. 502, 560, f. 82) S. A garden hybrid between *C. lawrenceanum* and *C. bellatulum*.

Cypripedium lawrenceanum. (*G. C.* 1878, x. 748; *B. M.* t. 6432; *Veitch Cat.* 1879, 23, f. 9.) S. Fl. somewhat like those of *C. barbatum*; foliage like *C. dayanum*. L. 1 ft. long with dark green mosaic on a whitish green ground. Upper sep. broad and round, with 13 dark purple veins running out to the edge and others between them which do not reach the edge; the lower sep. very small, white, with 5 dark purplish nerves. Pet. divaricate, narrow, green, purplish at tips, warted, ciliate. Lip large, dull purple, warted inside. Staminode split in the middle behind, with 5 anterior teeth, light yellowish-white reticulate with green, with purplish edge. Borneo.

—— Var. **coloratum.** (*G. C.* 1887, ii. 272.) S. A trifling form with a more acute upper sep., tinted with light mauve between the veins, and with numerous warts on the petals.

Cypripedium lawrenceanum hyeanum. (*L.* i. t. 42; *G. C.* 1886, xxv. 680.) S. A distinct form, having the veins of the large white dorsal sep. green; pet. ciliated, and the lip entirely green.

—— Var. **pleioleucum.** (*G. C.* 1888, iii. 744.) S. Garden variety.

—— Var. **stenosemium.** (*G. C.* 1887, ii. 38.) S. A slight var. with a narrower upper sep. than in the typical form.

—— Var. **viride.** (*L.* xii. t. 546.) S. A var. with fl. much greener than the type.

Cypripedium Lawrenceo-Regnieri. (*L.* xi. t. 504.) S. A garden hybrid between the two species indicated by the name.

Cypripedium lebaudyanum. (*R. H.* 1895, 360; *L.* xii. t. 529.) S. A garden hybrid between *C. lævigatum* and *C. haynaldianum*.

Cypripedium Ledouxiæ. (*O. R.* i. 117.) S. A garden hybrid of doubtful origin. It is said to be very near *C. harrisianum*.

Cypripedium leeanum. (*G. C.* 1884, xxi. 140; *Fl. and P.* 1884, 28; *L.* iii. t. 125.) S. A hybrid between *C. spicerianum* and *C. insigne Maulei*.

—— Var. **ampliatum.** (*G. and F.* 1893, 117.) S. Fl. one-third larger than the type.

—— Var. **biflorum.** (*G. C.* 1890, vii. 161.) S. Raised from *C. insigne Chantini* and *C. spicerianum*.

—— Var. **giganteum.** (*G. C.* 1890, viii. 718.) S. *C. spicerianum* crossed with *C. insigne*.

—— Var. **maculatum.** (*G. and F.* 1888, 4.) S. Garden hybrid.

—— Var. **superbum.** (*G. C.* 1886, xxv. 168; *Veitch Cat.* 1886, 11, f.) S. A var. with large and showy dorsal sep. marked with radiating rows of purple lines, green and shining at the base.

—— Var. **virginale.** (*G. C.* 1895, xvii. 82.) S. The dorsal sep. is mostly pure white.

Cypripedium lemoinierianum. (*G. C.* 1888, iii. 712; *H. G.* 1888, 370.) S. Garden hybrid.

Cypripedium Leonæ. (*L.* viii. t. 360; *G. C.* 1893, xiv. 342.) S. A garden hybrid between *C. insigne Chantini* and *C. callosum*.

Cypripedium leopoldianum. (*G. C.* 1895, xvii. 333.) S. A garden hybrid between *C. leeanum superbum* and *C. insigne Wallacei*.

Cypripedium leucorrhodum (*G. C.* 1885, xxiii. 270.) S. A hybrid between *C. Roezlii* and *C. Schlimii album*.

Cypripedium leysenianum. (*B. H. B.* 1894, 169, t.; *G. C.* 1894, xv. 817.) S. A garden hybrid between *C. barbatum* var. and *C. bellatulum*.

Cypripedium lineolare. (*G. C.* 1887, i. 447.) S. Garden hybrid.

Cypripedium littleanum. (*G. C.* 1895, xviii. 36; *O. R.* 1895, 209.) S. A supposed natural hybrid between *C. lawrenceanum* and *C. dayanum*.

Cypripedium longifolium gracile. (*Veitch Man. Cypr.* 65.) S. A small-flowered form, with narrow l. and slender scapes.

Cypripedium loochristianum. (*G. C.* 1895, xvii. 100.) S. A garden hybrid between *C. Hookeræ* and *C. harrisianum*.

Cypripedium Louisæ. (*O. R.* 1895, 50.) S. A garden hybrid, probably between *C. leeanum* and *C. Ashburtoniæ*.

Cypripedium lucidum. (*G. C.* 1877, viii. 521,) S. Garden hybrid between *C. Lowei* and *C. villosum*.

Cypripedium lucienianum. (*L.* viii. t. 362.) S. A garden hybrid between *C. villosum* and *C. ænanthum superbum* or *C. bellatulum*.

Cypripedium lynchianum. (*G. C.* 1893, xiv. 692.) S. A garden hybrid between *C. spicerianum* and *C. selligerum majus*.

Cypripedium Macfarlanei. (*G. C.* 1891, x. 300; *Gfl.* 1891, 534.) S. A hybrid between *C. calophyllum* and *C. spicerianum*.

Cypripedium macranthum ventricosum. (*R. H.* 1877, 310.) H. A var. with purple-red fl.; differing from the type in its long linear-acuminate twisted pendulous lateral sep. and longer more saccate lip. East Temperate Asia.

Cypripedium macrochilum. (*G. C.* 1891, x. 343, f. 40.) S. A hybrid between *C. longifolium* and *C. Lindeni*.

Cypripedium macropterum. (*G. C.* 1882, xviii. 552.) S. A garden hybrid between *C. Lowei* and *C. superbiens*.

Cypripedium margaritaceum. (*O.* 1888, t. 368.) G. Rhizome elongate. Stem short with two sub-opposite broadly elliptic l. at the middle. L. of a somewhat glaucous green, spotted with purplish brown, 5-9 nerved. Peduncle 1-flowered 3 in. long, glabrous. Sep. elliptic, the upper one broadest; pet. oblong-lanceolate, acute, all shortly ciliate on the margins, and all of a deep purple colour marked with rows of blackish-purple spots. Lip very remarkable, slightly concave above, with a circular crenulated orifice, formed by the short auricles overlapping each other, keeled beneath, dark brown covered with small tubercles. Staminode deflexed, cordate. Yunnan, China.

Cypripedium marmorophyllum. (*G. C.* 1876, vi. 130.) S. Hybrid between *C. Hookeræ* and *C. barbatum*.

Cypripedium Masonii. (*G. C.* 1895, xvii. 800.) S. A garden hybrid between *C. Stonei* and *C. spicerianum*.

Cypripedium massaianum. (*G. C.* 1893, xiv. 70, 267, f. 48.) S. A garden hybrid between *C. superciliare* and *C. rothschildianum*.

Cypripedium mastersianum. (*G. C.* 1879, xii. 102; *L.* iv. t. 159.) S. A curious species, with fl. resembling *C. insigne* in shape, and l. of the *venustum* group, but very obscurely tessellated. Peduncle dark purple; ovary curved, very hairy. Upper sep. transverse ovate, green with white border; lower sep. smaller, green: its apex bidentate. Pet. very broad, blunt, copper-coloured with numerous dark spots, and an ochre border at the lower part of base. Lip wide, brown, with ochre margins, much inflated. Staminode ochre, with two brown streaks, 3-toothed on the back, bilobed, with a very deep sinus internally. Sunda Islands.

Cypripedium mauriceanum. (*O. R.* i. 118.) S. A garden hybrid between *C. harrisianum* and *C. spicerianum*.

Cypripedium Maynardii. (*G. C.* 1890, viii. 702; *R.* ser. 2, t. 43.) S. A hybrid between *C. purpuratum* and *C. spicerianum*.

Cypripedium measuresianum. (*Williams' Cat.* 22; *W. O. A.* vii. t. 304.) S. Garden hybrid.

Cypripedium Meirax. (*G. C.* 1881, xiv. 524.) S. Garden hybrid.

Cypripedium melanophthalmum. (*G. C.* 1880, xiv. 525; *W. O. A.* t. 95.) S. Garden hybrid.

Cypripedium Memoria-Mœnsii. (*L.* viii. t. 361.) S. A garden hybrid, the parentage of which is unrecorded, but it is probably between *C. spicerianum* and *C. hirsutissimum*.

Cypripedium microchilum. (*G. C.* 1882, xvii. 77; *L.* ii. t. 50.) S. A garden hybrid between *C. niveum* and *C. Druryi*.

Cypripedium Millmani. (*G. C.* 1895, xvii. 800.) S. A garden hybrid between *C. lawrenceanum* and *C. philippinense*.

Cypripedium miteauanum. (*L.* iv. t. 146; *G. C.* 1888, iv. 326; *H. G.* 1888, 502.) S. [*C. ciliolare*, Reichb. f., var. *miteauanum*.]

Cypripedium mœnsianum. (*L.* iii. t. 129: *G. C.* 1888, iii. 561.) S. Similar to *C. Argus*, and probably a var. of that species, differing in its broader upper sep. and pet. which are marked with larger and more numerous spots; the upper sep. is also spotted along the nerves. Philippines.

Cypripedium Mœnsii. (*O. R.* 1894, 335.) S. A garden hybrid between *C. spicerianum* and some other species.

Cypripedium montanum. (*Fl. and P.* 1883, 10; *B. M.* t. 7319.) H. 1 ft. high, with lanceolate pubescent l., and brownish-purple white-lipped fl. Oregon, &c.

Cypripedium Morganiæ burfordiense. (*R.* ser. 2, t. 1.) S. A richly coloured form of this garden hybrid.

Cypripedium Morganiæ langleyense. (*G. C.* 1894, xv. 84; *O. R.* 1894, 79.) S. A garden hybrid between *C. superbiens* and *C. Stonei platytænium*.

Cypripedium Nandi. (*G. C.* 1894, xvi. 318.) S. A garden hybrid between *C. callosum* and *C. tautzianum*.

Cypripedium nigritum. (*G. C.* 1882, xviii. 102.) S. Much like *C. barbatum*, but the dorsal sep. oblong, acute; the pet. are narrower and the marginal warts stand partly over the middle to the apex, and the staminode has an intermediate tooth in front, and longer angles on each side of the dorsal sinus. Borneo.

Cypripedium Niobe. (*G. C.* 1889, vi. 701; *W. O. A.* t. 438.) S. Hybrid of *C. fairieanum* and *C. spicerianum*.

—— Var. **superbum.** (*G. C.* 1891, x. 591). S. A var. of the hybrid *C. spicerianum* × *C. fairieanum*.

Cypripedium nitens. (*G. C.* 1878, ix. 398; *L.* v. t. 223.) S. Garden hybrid between *C. insigne Maulei* and *C. villosum*.

Cypripedium nitidissimum. (*G. C.* 1888, iv. 6; *H. G.* 1888, 396.) S. Garden hybrid. [*Selenipedium nitidissimum*, Reichb. f.]

Cypripedium obscurum. (*G. C.* 1887, i. 8.) S. Garden hybrid.

Cypripedium occidentale. (*Gfl.* t. 1036.) H. In the way of *C. parviflorum*, with broadly elliptic acute l., and a stem bearing 1–3 fl., with twisted purple-bown sep. and a white lip. [*C. montanum*, Dougl.] California.

Cypripedium œnanthum. (*G. C.* 1876, v. 297; *W. O. A.* t. 379.) S. Hybrid between *C. insigne* and *C. harrisianum*.

—— Var. **punctatum.** (*O. R.* 1894, 334.) S. A form of the garden hybrid between *C. harrisianum* and *C. insigne*.

—— Var. **superbum.** (*Veitch Cat.* 1885, 6, 11, f.) S. A hybrid between *C. harrisianum* and *C. insigne Maulei*.

Cypripedium œno-superbiens. (*J. of H.* 1893, xxvii. 269, f. 38.) S. A garden hybrid between *C. œnanthum* and *C. superbiens*.

Cypripedium orbum. (*G. C.* 1887, ii. 778.) S. Garden hybrid.

Cypripedium orphanum. (*G. C.* 1886, xxvi. 166; *W. O. A.* t. 455.) S. Garden hybrid.

Cypripedium pageanum. (*G. C.* 1888, iv. 264; *H. G.* 1888, 504; *O.* 1888, 257.) S. Garden hybrid.

Cypripedium palatinum. (*W. G.* 1896, 105; 1897, 115, t. 1.) S. A garden hybrid between *C. spicerianum* and *C. harrisianum*.

Cypripedium patens. (*G. C.* 1877, viii. 456.) S. A garden hybrid between *C. barbatum* and *C. Hookeræ*.

Cypripedium Paulii. (*O. R.* i. 147; *L.* xii. t. 571.) S. A garden hybrid between *C. harrisianum* and *C. selligerum*.

Cypripedium pavoninum. (*G. C.* 1888, iii. 264; *O.* 1888, 132.) S. Garden hybrid between *C. Boxallii* and *C. venustum*.

Cypripedium pendulum. (*G. C.* 1895, xviii. 192.) S. A garden hybrid between *C. Argus Mænsii* and *C. philippinense*.

Cypripedium petersianum. (*G. C.* 1888, iii. 331.) S. Garden hybrid.

Cypripedium Petri. (*G. C.* 1880, xiii. 680.) S. Sep. white, with distinct green veins. Pet. light brown, green at the base, ligulate, acute, ciliate with long hairs. Lip greenish-brown; disk sepia brown; angles green; warts on the border of the base purplish. Malay Archipelago.

Cypripedium picturatum. (*G. C.* 1895, xviii. 326.) S. A garden hybrid between *C. spicerianum* and *C. superbiens*.

Cypripedium pitcherianum. (*American Florist*, 1887, 178; *G. C.* 1888, iii. 42; *O.* 1888, 97.) S. [*C. Argus*, Reichb. f.] Philippines.

Cypripedium platycolor. (*G. C.* 1895, xviii. 655.) S. A garden hybrid between *C. Stonei platytænium* and *C. concolor*.

Cypripedium pleistochlorum. (*G. C.* 1887, ii. 552.) S. Garden hybrid.

Cypripedium plunerum. (*G. C.* 1887, i. 40.) S. Garden hybrid.

Cypripedium politum. (*G. C.* 1880, xiv. 525; *W. O. A.* t. 36.) S. Garden hybrid.

Cypripedium pollettianum. (*G. C.* 1890, viii. 702; *R.* ser. 2, t. 43.) S. A hybrid between *C. calophyllum* and *C. venustum superbum*.

Cypripedium polystigmaticum. (*G. C.* 1888, iv. 407.) S. Garden hybrid.

Cypripedium porphyreum. (*G. C.* 1878, ix. 366.) S. Garden hybrid. [*Selenipedium porphyreum*, Reichb. f.]

Cypripedium porphyrochlamys. (*G. C.* 1884, xxi. 476; *W. O. A.* t. 426.) S. A garden hybrid between *C. barbatum biflorum*, and *C. hirsutissimum*.

Cypripedium porphyrospilum. (*G. C.* 1879, xii. 489.) S. Garden hybrid between *C. Lowei* and *C. Hookeræ*.

Cypripedium poyntzianum. (*G. C.* 1894, xv. 36; *O. R.* 1894, 54.) S. A supposed natural hybrid between *C. callosum* and *C. Hookeræ*.

Cypripedium præstans. (*G. C.* 1886, xxvi. 776; 1887, ii. 243, 813, 814; *Ill. H.* 1887, t. 26.) S. Like *C. philippinense*, having similar l., and a several-flowered hairy peduncle. Fl. large, sep. nearly equal, the lower one broadest, striped with dark brown, the 3 median nerves keeled outside. Pet. narrow, twisted, wavy at base, tapering towards apex, hairy on the margins at the base, yellowish, with reddish brown nerves at the base, and dark brown spots on the margin. Lip similar to that of *C. Stonei*, with a very long basal part, yellowish. New Guinea.

—— Var. **kimballianum.** (*L.* vi. t. 249.) S. Fl. richly coloured; the stripes more numerous and broader, and the spots larger than in the type.

Cypripedium pryorianum. (*G. C.* 1893, xiv. 692.) S. A garden hybrid between *C. lathamianum* and *C. harrisianum*.

Cypripedium pycnopterum. (*G. C.* 1876, v. 622.) S. Garden hybrid.

Cypripedium radiosum. (*G. C.* 1885, xxiv. 424, misprinted *C. radissum*.) S. A garden hybrid between *C. lawrenceanum* and *C. spicerianum*.

Cypripedium refulgens. (*G. C.* 1895, xvii. 210, 338.) S. A garden hybrid between *C. Curtisii* and *C. hirsutissimum*.

Cypripedium regale. (*Bull Cat.* 1887, 10.) S. Garden hybrid.

Cypripedium Reginæ. (*G. C.* 1896, xx. 534.) S. A garden hybrid between *C. leeanum* and *C. fairieanum*.

Cypripedium regnaldianum. (*Sand. Cat.* 1896, 24.) S. A garden hybrid between *C. insigne* and *C. callosum*.

Cypripedium reticulatum. (*Fl. and P.* 1882, 171; *G. C.* 1882, xviii. 520.) S. L. very long, blackish green and rather rugose. Fl. light green. Sep. very crisp and reticulate, the inflexed part of the lip whitish-yellow marked with brown and green blotches: ovary brown with the apex and three ribs green. [*Selenipedium boissierianum*, Reichb. f.] Colombia?

Cypripedium robinianum. (*O. R.* 1894, 79.) S. A garden hybrid between *C. Parishii* and *C. Lowei*.

Cypripedium robustius. (*G. C.* 1889, v. 394.) S. Raised from *C. Sedeni* and *C. longifolium*.

Cypripedium Rœbelenii. (*G. C.* 1883, xx. 684.) S. Very near *C. philippinense*, but with narrower l., and more hairy peduncle; upper sep. narrow, whitish, with five long and three short purple nerves; lower sep. purplish-white, longer than the lip, which is light yellow. Staminode light ochre. Philippine Islands.

Cypripedium rossianum. (*O. R.* 1895, 359.) S. A garden hybrid between *C. barbatum* and *C. tonsum*.

Cypripedium rothschildianum. (*G. C.* 1888, iii. 457; *B. M.* t. 7102.) S. Allied to *C. glanduliferum* (*C. præstans*). L. 2 ft. or more long, 2½–3 in. broad, glossy green. Scape 3- or more-flowered. Upper sep. oblong acute, yellowish with numerous very dark brown stripes, and white borders. Pet. linear with a wavy base, yellowish-green with dark lines and blotches at

the base. Lip like that of *C. Stonei*, brown with an ochreous border to the mouth. Staminode stout at base, rising erect and then bending down into a beak-like hairy process. New Guinea.

Cypripedium rothwellianum. (*G. C.* 1896, xx. 310.) S. A garden hybrid between *C. Stonei* and *C. Argus*.

Cypripedium Sallieri pictum. (*G. and F.* 1893, 117.) S. A garden hybrid between *C. villosum superbum* and *C. insigne Chantini*.

Cypripedium Sanderæ. (*G. and F.* 1896, 144.) S. A provisional name for an imported plant described as having a large spear-shaped dorsal sep. coloured crimson, yellow and green, broad pet. coloured yellow and red, and a long narrow yellow pouch.

Cypripedium sanderianum. (*G. C.* 1886, xxv. 554; xxvi. 370; *R.* ser. 1, t. 3.) S. Like *C. caudatum* and *C. Stonei*. Sep. yellowish-green with purple-brown nerves. Pet. 1 ½ ft. long, linear, twisted, purple-brown, fading into yellow, spotted and barred with purple-brown towards the base, where there are some retrorse purple bristles. Lip much like that of *C. Stonei* in shape, but of a greenish-bronze colour. Malay Archipelago.

Cypripedium Sandero-superbiens. (*G. C.* 1893, xiv. 278; *J. of H.* xxvii. 215, f. 31.) S. A garden hybrid between *C. sanderianum* and *C. superbiens*.

Cypripedium saundersianum. (*G. C.* 1886, xxvi. 654.) S. Garden hybrid.

Cypripedium savageanum. (*G. C.* 1888, iv. 407.) S. Garden hybrid.

Cypripedium schofieldianum. (*G. M.* 1896, 283, f.) S. A garden hybrid between *C. bellatulum* and *C. hirsutissimum*.

Cypripedium schomburgkianum. (*G. C.* 1890, vii. 336.) S. A small species with linear l. and elegant fl. It is very near *C. caricinum*. [*Selenipedium klotzschianum*, Reichb. f.] British Guiana.

Cypripedium Schrœderæ. (*G. C.* 1883, xix. 432; *W. O. A.* t. 196.) S. A hybrid between *C. caudatum* and *C. Sedeni*. [Syn. *Selenipedium Schrœderæ*.]

Cypripedium splendens. (*L.* ii. t. 69.) S. Garden hybrid.

Cypripedium Sedeni albanense. (*Veitch Man. Cypr.* 105.) S. A form of *C. Sedeni* (*C. longifolium* × *C. Schlimii*) intercrossed with *C. Schlimii*. [*Selenipedium Sedeni*, Reichb. f., var.]

Cypripedium Sedeni candidulum. (*Veitch Cat.* 1886, 11, f.) S. A hybrid between *C. longifolium* and *C. Schlimii albiflorum*. [*Selenipedium Sedeni*, Reichb. f., var.]

Cypripedium selligerum. (*Fl. and P.* 1878, 85; *W. O. A.* t. 255.) S. Garden hybrid between *C. barbatum* and *C. lævigatum*.

—— Var. **majus.** (*L.* i. t. 22.) S. A var. with larger fl.

Cypripedium siamense. (*G. C.* 1890, vii. 161; *Gfl.* 1890, 257; *O. R.* iv. 17, f.) S. A species with tessellated l. and green and purple fl., closely allied to *C. javanicum*. Siam.

Cypripedium sibyrolense. (*Ill. H.* 1893, t. 179.) S. A garden hybrid between *C. Boxallii* and *C. insigne*.

Cypripedium signatum. (*Bull Cat.* 1895, 7.) S. A garden hybrid between *C. spicerianum* and *C. villosum*.

Cypripedium Smithii. (*G. C.* 1895, xviii. 152.) S. A garden hybrid between *C. lawrenceanum* and *C. ciliolare*.

Cypripedium southgatense. (*G. C.* 1892, xi. 698; *J. of H.* 1892, xxv. 39, f. 6.) S. A garden hybrid between *C. bellatulum* and another.

—— Var. **superbum.** (*G. C.* 1893, xiv. 630.) S. A garden hybrid between *C. bellatulum* and *C. harrisianum*.

Cypripedium spicerianum. (*B. M.* t. 6490; *G. C.* 1880, xiii. 363, 41, f. 7.) S. L. deep green, unspotted, except the sheathing portion at the base, which is mottled with purple. Scape one-flowered. Upper sep. very large; the margins very strongly recurving; the apex produced into a compressed ridge; the base is green, the rest pure white with a purple middle line. Lower sep. white. Pet. undulate, greenish with purple specks, shorter than the purple-brown lip. Assam.

Cypripedium spicerianum mercatellianum. (*B. T. O.* 1893, 144, t.) S. Fl. whiter than in the type.

Cypripedium statterianum. (*G. C.* 1893, xiv. 536; *J. of H.* xxvii. 417, f. 61.) S. A garden hybrid between *C. spicerianum* and *C. vexillarium*.

Cypripedium stenophyllum. (*G. C.* 1876, v. 461.) S. Garden hybrid.

Cypripedium Stonei candidum. (*G. C.* 1892, xii. 75.) S. A var. with ivory-white fl., the lip tinged with lilac and the pet. with rose.

—— **Var. platytænium.** (*F. M.* t. 414.) S. A fine var. with long straight broad pet. very handsomely spotted. Borneo.

Cypripedium suffusum. (*G. C.* 1895, xvii. 210.) S. A garden hybrid between *C. lawrenceanum* and *C. venustum?*

Cypripedium superciliare. (*G. C.* 1876, v. 795.) S. Hybrid between *C. barbatum* and *C. superbiens*.

Cypripedium swanianum. (*G. C.* 1876, vi. 36.) S. A garden hybrid between *C. dayanum* and *C. barbatum*.

Cypripedium Swinburnei. (*G. C.* 1892, xi. 136.) S. A garden hybrid between *C. insigne* and *C. Argus*.

Cypripedium Symondsiæ. (*O. R.* 1896, 16.) S. A garden hybrid probably between *C. venustum* and *C. purpuratum*.

Cypripedium tautzianum. (*G. C.* 1886, xxvi. 681; *Gfl.* 1887, 286.) S. Garden hybrid.

—— **Var. lepidum.** (*G. C.* 1888, iv. 756.) S. Garden hybrid.

Cypripedium thayerianum. (*G. C.* 1893, xiv. 193.) S. A garden hybrid between *C. lawrenceanum* and *C. Boxallii*.

Cypripedium thibautianum. (*G. C.* 1886, xxv. 104.) S. A garden hybrid between *C. harrisianum* and *C. insigne Maulei*.

Cypripedium tonso-villosum. (*G. and F.* 1893, 117.) S. A garden hybrid between the two species indicated in the name.

Cypripedium tonsum. (*G. C.* 1883, xx. 262.) S. Allied to *C. javanicum*, with rather narrow l. marked as in *C. dayanum*; dorsal sep. broad, whitish, with 21 green nerves, a small brown blotch on each border inside, and a green disk outside: lower sep. half as long as the large greenish lip, which has a tint of sepia over the upper surface: pet. oblong-ligulate, acute, nearly free from cilia, green, washed with sepia, and marked with dark brown spots. Sumatra or Java.

Cypripedium triumphans. (*G. C.* 1894, xv. 198.) S. A garden hybrid between *C. œnanthum superbum* and *C. Sallieri hycanum*.

Cypripedium tryonianum. (*G. C.* 1893, xiv. 134.) S. A garden hybrid between *C. harrisianum* and *C. superbiens*.

Cypripedium uihleinianum. (*Sand. Cat.* 1895, 10.) S. A garden hybrid between *C. Curtisii* and *C. spicerianum*.

Cypripedium umlauftianum. (*G. C.* 1893, xiv. 70.) S. A garden hybrid between *C. insigne Chantini* and *C. lawrenceanum*.

Cypripedium vanhoutteanum. (*L.* iii. t. 130.) S. Garden hybrid. [Spelled *C. houtteanum* in *G. C.* 1888, iii. 561.]

Cypripedium Vanneræ. (*G. C.* 1895, xvii. 402; *O. R.* 1895, 144.) S. A garden hybrid between *C. selligerum majus?* and *C. Curtisii*.

Cypripedium variopictum. (*G. C.* 1888, iv. 407.) S. Garden hybrid.

Cypripedium venusto-spicerianum. (*G. C.* 1889, v. 394.) S. Garden hybrid. It has the general appearance of *C. spicerianum*.

Cypripedium venustum measuresianum. (*G. C.* 1893, xiv. 756.) S. A var. with fl. in which the only colours are white and green.

Cypripedium vernixium. (*G. C.* 1879, xi. 398.) S. A garden hybrid between *C. Argus* and *C. villosum*.

—— Var. **punctatum.** (*G. and F.* 1893, 117.) S. A var. with a recurved dorsal sep. and slight colour differences.

Cypripedium vervætianum. (*G. C.* 1888, iii. 712; *H. G.* 1888, 370.) S. Garden hybrid.

Cypripedium vexillarium. (*Fl. and P.* 1880, 13 f.; *W. O. A.* t. 447.) S. Garden hybrid.

Cypripedium vexill-Io. (*G. C.* 1893, xiii. 752.) S. A garden hybrid between *C. vexillarium* and *C. Io.*

Cypripedium vigerianum. (*R. H.* 1895, 359; *G. C.* 1895, xviii. 100.) S. A garden hybrid between *C. barbatum* and *C. superciliare.*

Cypripedium villosum Gortoni. (*G. C.* 1893, xiii. 40.) S. A var. differing from the type chiefly in the purplish colour of its fl. Burma.

—— Var. **measuresianum.** (*G. C.* 1893, xiv. 297.) S. A var. with large dark blotches as in *C. Boxallii atratum.*

—— Var. **Truffautii.** (*G. C.* 1896, xix. 104.) S. L. broader and fl. larger than in the type.

—— Var. **violaceum.** (*G. C.* 1893, xiii. 195.) S. A garden hybrid between *C. villosum* and *C. hirsutissimum.*

Cypripedium Vipani. (*G. C.* 1890, vii. 792.) S. A hybrid from *C. philippinense* and *C. niveum.* It is very similar to *C. Aylingi.*

—— Var. **roseum.** (*O. R.* i. 245.) S. A garden hybrid between *C. niveum* and *C. philippinense*, var.

Cypripedium vittatum breve. (*G. C.* 1881, xv. 656.) S. A var. in which the lower sep. does not exceed the lip in size. Brazil.

Cypripedium volonteanum giganteum. (*G. C.* 1893, xiii. 641.) S. A var. with fl. twice as large as the type.

Cypripedium von-molianum. (*G. C.* 1892, xi. 502.) S. A garden hybrid between *C. spicerianum* and *C. hirsutissimum.*

Cypripedium wallærtianum. (*G. C.* 1895, xviii. 655.) S. A garden hybrid between *C. harrisianum* and *C. villosum.*

Cypripedium Warnero-superbiens. (*G. C.* 1892, xii. 301.) S. A garden hybrid between the two species indicated in the name.

Cypripedium warnhamiense. (*G. C.* 1895, xviii. 248.) S. A garden hybrid between *C. philippinense* and *C. Curtisii.*

Cypripedium watsonianum. (*O. R.* i. 244.) S. A garden hybrid between *C. harrisianum nigrum* and *C. concolor.*

Cypripedium weathersianum. (*L.* ix. t. 397.) S. A garden hybrid between *C. leeanum superbum* and *C. hirsutissimum.*

Cypripedium whitelyanum. (*G. C.* 1895, xviii. 307.) S. A garden hybrid between *C. Boxallii atratum* and *C. lawrenceanum.*

Cypripedium williamsianum. (*G. C.* 1882, xvii. 218; *W. O. A.* t. 365.) S. Garden hybrid.

Cypripedium winnianum. (*G. C.* 1886, xxv. 362; 1893, xiii. 207.) S. A garden hybrid between *C. villosum* and *C. Druryi.*

Cypripedium wolterianum. (*G. C.* 1895, xvii. 166.) S. Allied to *C. Lowei*, which it resembles in general appearance, but differs principally in its smaller inferior sep., in the colour of the basal part of the pet., in its smoothness.

Cypripedium youngianum. (*G. C.* 1890, viii. 183.) S. A hybrid between *C. superbiens* and *C. Rœbelenii.*

—— Var. **superbum.** (*G. C.* 1892, xii. 138.) S. A garden hybrid between *C. philippinense* and *C. superbiens.*

Cypripedium Yvonnæ. (*Ill. H.* 1895, t. 26.) S. A var. of *C. leeanum*, not unlike that known as *giganteum.*

Cyrtandra pendula. (*G. C.* 1883, xx. 70.) Gesneraceæ. S. per. L. long-petioled, elliptic, dark-green, blotched with grey: peduncle long decumbent, bearing an involucrate head of several white fl., externally clothed with silky brown hairs, and dotted with purple inside on the lower part. Java.

Cyrtandra Pritchardii. (*Gfl.* 1887, 130.) S. A glabrous shr. with petiolate elliptic obtusely-toothed l., acute

at both ends, 5–6 in. long, by 2–2½ in. broad, and pedunculate axillary 3-flowered cymes of small white fl., succeeded by ovoid white berries. Fiji.

Cyrtanthus Galpini. (*K. B.* 1892, 83.) Amaryllidaceæ. G. Allied to *C. sanguineus* with large bright red fl., which are developed before the l. Transvaal.

Cyrtanthus hybridus. (*G. C.* 1885, xxiv. 391.) G. A hybrid between *Cyrtanthus sanguineus flammeus* and *Vallota purpurea*.

Cyrtanthus intermedius. (*G. C.* 1893, xiii. 413.) G. A garden hybrid between *C. Mackenii* and *C. angustifolius*.

Cyrtanthus lutescens. (*G. C.* 1888, iii. 172.) G. Bulb, similar in appearance to *C. Mackenii*. Umbel 3–4 flowered; fl. funnel-shaped, 2 in. long, pale yellow. South Africa.

Cyrtanthus obliquus major. (*Sand. Cat.* 1896, 57.) G. Appears not to differ from the type. South Africa.

Cyrtanthus O'Brieni. (*G. C.* 1894, xv. 716.) G. Intermediate between *C. angustifolius* and *C. Macowani*. L. linear, contemporary with the fl., which are bright scarlet, 1½ in. long, about eight in an umbel. South Africa.

Cyrtanthus parviflorus. (*G. C.* 1891, ix. 104.) G. Allied to *C. angustifolius*. Fl. bright scarlet, produced with the linear l. South Africa.

Cyrtomium Caryotidium attenuatum. (*G. C.* 1886, xxv. 787.) Filices. G. A var. with caudate pinnæ. [*Aspidium falcatum*, Sw. var.] India.

Cyrtomium falcatum pendulum. (*Veitch Cat.* 1892, 8.) G. Differs from the type in its pendulous habit and narrower pinnæ. [*Aspidium falcatum*, Sw. var.]

Cyrtopera flexuosa. (*K. B.* 1894, 363.) Orchidaceæ. S. Pseudobulbs ovoid 1 in. long, bearing four linear elongate flaccid l. nearly 1 ft. long; scape erect, 1 ft. long, flexuous; fl. nearly 1 in. across, white, with purple spots and a yellow blotch on the lip. East Tropical Africa.

Cyrtopera papillosa. (*K. B.* 1893, 336.) S. Allied to *C. foliosa*. L. lanceolate, 12 in. long; scape 2 ft. high, bearing a few fl. each about 1 in. across and coloured yellow with purplish brown on the side lobes of the lip. Natal.

Cyrtopera plantaginea. (*G. C.* 1882, xvii. 700.) S. An interesting plant, with l. like a *Calanthe*, and a long raceme of numerous long-bracted fl. Sep. light green. Pet. short, broad, white with a green border. Lip white with bluish-green side lobes streaked with brown. Madagascar.

Cyrtopera Regnieri. (*G. C.* 1886, xxvi. 294.) S. L. oblanceolate; raceme of large yellow fl. on a tall peduncle arising from the side of the leafy shoot. Sep. and pet. falcate, lanceolate, acute. Lip oblong-lanceolate, with a wide blunt angle on each side at the middle. Spur conical. Cochin China.

Cyrtopodium Aliciæ. (*L.* viii. t. 371.) Orchidaceæ. S. Allied to *C. cristatum*. It has large fusiform pseudobulbs, long linear lanceolate l. and a tall branched scape bearing numerous fl., which are 1½ in. across, green with brown spots, and a three-lobed labellum, white with crimson spots. Brazil.

Cyrtopodium flavescens. (*L.* x. 84.) S. Allied to *C. Andersoni*. Fl. produced before the l.; scape 3 ft. high, bearing numerous yellow fl. Venezuela.

Cyrtopodium saintlegerianum. (*G. C.* 1885, xxiii. 756; 1888, iv. 181, f. 20.) S. Allied to *C. punctatum*: pseudobulbs about 18 in. long; inflorescence about 2 in. long. Fl. yellow, spotted with brown; lip with broad oblong side lobes and a very short obtriangular retuse middle lobe with a callose border. Paraguay.

Cyrtopodium virescens. (*B. M.* t. 7396.) S. Pseudobulbs tufted, fusiform, 4 in. long; l. 1 ft. long, 1 in. broad, plicate; scape 4 ft. high, the upper half clothed with fl. 1 in. in diam., and coloured pale yellow blotched with red. Brazil.

Cyrtosperma ferox. (*Ill. H.* 1892, t. 153.) Araceæ. S. Foliage plant with prickly petioles and scapes, arrow-shaped l. and greenish-white spathes. Borneo.

Cyrtosperma Johnstoni. (*G. C.* 1883, xviii. 808; *Fl. and P.* 1883, 27.) S. A reference to its right genus of the plant known as *Alocasia Johnstoni*. Solomon Isles.

Cyrtosperma matrieffianum. (*G. C.* 1884, xxi. 711; *Cat. Comp. Cont. d'Hort.* 1885, 4.) S. A foliage plant with dark green l. on spiny petioles; in the young plants the l. are sagittate: in older plants they become divided into numerous narrow segments. Borneo. [*Podolasia stipitata*, N. E. Br.]

Cytisus albus multiflorus. (*W. G.* 1888, 391.) Leguminosæ. H. shr. Garden var.

Cytisus filifer. (*R. H.* 1886, 547.) H. shr. Said to be a form of *Genista tinctoria*, with numerous pale yellow flowers.

Cytisus glabrescens. (*M. D. G.* 1896, 25.) H. A small bush with bright yellow fl. Mountains of Upper Italy.

Cytisus incarnatus major. (*R. H.* 1875, 240.) H. shr. like the type, but with larger fl. of a deep vinous rose. [*C. albus*, Linn. var.]

Cytisus nigricans nanus. (*G. and F.* 1889, 164.) G. [*Cytisus capitatus*, Scop.]

Cytisus schipkaensis. (*Cat. Nat. Arb. Zösch.* 1892, 15.) G. H. shr. A dwarf species about 1 ft. high with white fl. Balkan Mountains.

Cyrtochilum micranthum. (*G. C.* 1896, xx. 63.) Orchidaceæ. G. Resembling *C. maculatum*, but smaller, with greenish spotted sep. and pet., and the lip white with two brown blotches and a yellow anterior part. Brazil.

Daboecia cantabrica calyculata. (*Nat. Arb. Zösch.* 1891, 14; *G. C.* 1891, ix. 461.) Ericaceæ. H. shr. producing both red and white fl. A form in which the calyx is developed so as to give it the appearance of having double flowers. [*D. polifolia*, D. Don, var.]

Dædalacanthus macrophyllus. (*B. M.* t. 6686.) Acanthaceæ. S. A tall herb, with large elliptic acuminate pubescent l., and large panicles of pale blue fl., the lower lobe of the corolla being violet blue. Burma.

Dahlia gracilis. (*Gfl.* t. 861.) Compositæ. H. H. per. L. bipinnate: leaflets ovate, coarsely toothed. Fl. on rather long, slender peduncles, 2–2½ in. in diam., scarlet with a yellow centre. Mexico.

Dahlia Yuarezii. (*G. C.* 1879, xii. 432, f. 66.) H. H. With strap-shaped florets of a rich crimson colour, giving it somewhat the appearance of Japanese *Chrysanthemum*.

Damnacanthus indicus. (*Gfl.* 1889, 359.) Rubiaceæ. H. or G. evergreen shr., with opposite shining green l. and tubular white fl., succeeded by small scarlet berries; the fl. and fr. are on the plant at the same time in the spring. Japan.

Daphne blagayana. (*Fl. des S.* t. 2313; *B. M.* t. 7519.) Thymelæaceæ. H. shr. of dwarf habit, much in the way of *D. collina*. Bark brown. L. 1–1½ in. long, oblong-lanceolate, acute. Fl. in terminal heads, white. Styria.

Daphne glomerata. (*Nat. Arb. Zösch.* 1891, 14.) H. A dwarf shr. something in the way of *D. blagayana*, with naked stems crowned by a rosette of oblanceolate obtuse l., among which are clustered the umbels of lilac-purple fl. Caucasus: Armenia.

Dasylirion quadrangulatum. (*Gfl.* 1887, 280, f. 75.) Liliaceæ. G. Stem stout, about 3 ft. high, crowned with a dense tuft of slender quadrangular l., about 2 ft. long. Fl.-stem about 5 ft. high, with a dense spike-like panicle of small fl. Texas.

Davallia brachycarpa. (*Fl. and P.* 1883, 157.) Filices. S. evergreen fern with the aspect of an *Asplenium*, having large arching quadri-pinnatisect bright green fronds; pinnæ 6 in. long, ovate-lanceolate: ultimate segments cuneate, trifid or bifid, bluntish: fertile ones falcate, with a solitary sorus on the under side. New Hebrides.

Davallia elegans polydactyla. (*Veitch Cat.* 1882, 18; *Fl. and P.* 1882, 52.) S. Form with crested fronds.

Davallia ferruginea. (*G. C.* 1887, i. 639.) S. A large sarmentose species, with decompound fronds, having small sessile crowded cuneate ultimate segments. Madagascar.

Davallia fijiensis elegans. (*G. C.* 1893, xiii. 641.) S. A var. with finely divided fronds.

—— Var. **major.** (*Veitch Cat.* 1879, 24.) S. fern with slender stipes and gracefully arching fronds; pinnules finely cut, bright green. Fiji.

—— Var. **plumosa.** (*Fl. and P.* 1882, 26; *Bull Cat.* 1882, 15.) S. evergreen fern, with large spreading fronds 2–3 ft. long, cut into multitudinous narrow segments. Fiji.

Davallia fœniculacea. (*Williams' Cat.* 1889, 30.) S. An evergreen fern, with a short thick decumbent stem, and quadripinnate finely cut fronds. 1½-2 ft. high, the pinnules cut down to the rhachis into narrow entire or forked segments.

Davallia griffithiana. (*G. C.* 1882, xvii. 672; *Fl. and P.* 1882, 89.) G. Rhizome covered with silvery scales. Fronds deltoid, attenuate, coriaceous, bluish-green, tripinnate. Pinnæ acuminate: pinnules oblong-lanceolate, obtuse and pinnatifid with short obtuse lobes, base obliquely cuneate. Himalaya.

Davallia Mariesii. (*Veitch Cat.* 1880. 21, t. 11.) G. fern of dwarf habit and free growth. [*D. bullata*, Wall. var. *Mariesii*, Moore.] Japan.

Davallia retusa. (*Veitch Cat.* 1886, 11.) S. fern of spreading habit, with deltoid tripinnate fronds. having pale reddish stipes and rhachides and light green rhomboidal or cuneate pinnules. [*Lindsaya retusa*, Mett.] Sumatra.

Davallia tenuifolia Burkei. (*G. C.* 1895, xviii. 102.) S. A pendent var. New Guinea.

—— Var. **veitchiana.** (*Fl. and P.* 1882, 122; *G. C.* 1882, xviii. 648.) S. fern, with spreading plume-like broadly ovate quadripinnate fronds; the ultimate lobes cuneate, simple or bifid. China.

Davallia truffautiana. (*Ill. H.* 1895, 186; *G. M.* 1896, 352, f.) G. Species with large spreading fronds, a peculiarity of which is that the under surface is like the upper.

Davidsonia pungens. (*Bull Cat.* 1878, 6.) Saxifragaceæ. S. shr. of erect habit, with alternate spreading imparipinnate l. nearly 2 ft. long; leaflets 11–13, terminal one about 9 in. long, biserrate, scabrid-hairy; rhachis with a narrow biserrate wing. Foliage bright red when young, becoming deep green. [No doubt *D. pruriens*, F. Muell.] Australia.

Debregeasia velutina. (*R. H.* 1896, 321, f. 118.) Urticaceæ. G. shr. attaining a height of 6 to 9 ft. with stalked lanceolate serrate l. and shortly-stalked heads of fruit about the size of a pea, of a bright red colour. East Indies.

Decaisnea insignis. (*B. M.* t. 6731; *R. H.* 1884, 383.) Berberidaceæ. G. shr. with one or more trunks arising from a common root, 5-10 ft. high, with a few erect sub-terminal branches. L. at the ends of the branches, 2-3 ft. long, pinnate; leaflets numerous, ovate or elliptic-ovate, acute. Fl. 1 in. long, green, dicecious, in terminal racemes 1 ft. long. Eastern Himalaya.

Decaschistia ficifolia. (*G. C.* 1888, iv. 565.) Malvaceæ. S. A handsome shr. with 3-lobed l., cuneate at base, the lobes toothed, hoary beneath. Fl. 3 in. or more in diameter, coppery red, merging into yellow, with a rosy spot at the base. Burma.

Deherainia smaragdina. (*B. M.* t. 6373.) Myrsinaceæ. S. shrub, with brown hairy branchlets, terminated with tufts of lanceolate more or less serrate l., beneath which arise the large dull green fl. Cultivated as *Jacquinia smaragdina* and *Theophrasta smaragdina*. Mexico.

Delarbrea (?) spectabilis. (*Ill. H.* 1878, t. 314.) Araliaceæ. S. shr. with greyish-brown stems and petioles marked with darker lenticels. L. bipinnate or pinnate; pinnæ in 8–10 pairs, each pinna composed of three leaflets, or simply 3-lobed; leaflets ovate-acute, the terminal ones often 3-lobed: margins coarsely and irregularly serrate, dark green above, paler beneath. This is the plant known in gardens under the names *Aralia spectabilis* and *A. coccinea*. New Caledonia.

Delphinium armeniacum. (*Gn.* 1894, 48.) Ranunculaceæ. H. per. with azure-blue fl. The general habit of the plant is similar to that of *D. Ajacis*, but more robust. Armenia.

Delphinium azureum album. (*Fl. and P.* 1882, 52.) H. per. A var. with white fl. North America.

Delphinium cashmirianum Walkeri. (*B. M.* t. 6830.) H. per. of dwarf habit; l. orbicular, 3–5 lobed, the lobes lobulate; peduncles 3–4 in. long, 1-flowered; fl. large, 1 in. or more in diam., pale blue with darker stripes, with dull yellowish pet. tipped with purple. Whole plant hairy. Cashmir.

Delphinium caucasicum dasyanthum. (*Gfl.* t. 1027.) H. per. herb. Radical l. palmately lobed and toothed; bracts lanceolate, acute, entire. Fl. solitary in the axil of each bract, on long bracteate peduncles about 1½ in. in diam., dark blue, glandular hairy. The stem is simple, 1½–2 ft. high, producing fl. almost from the base in a racemose manner. Mandschuria.

Delphinium Emiliæ. (*G. C.* 1894, xvi. 434.) H. Near *D. hesperium* and *D. variegatum*. 1½–2 ft. high. Fl. dark blue. California.

Delphinium nudicaule aurantiacum. (*W. G.* 1888, 436.) H. Garden variety.

Delphinium Nuttalli. (*Gard.* 1894, xlvi. 511.) H. Growing 2–2½ ft. high. Fl. white with sky blue spots on the upper segments. North America.

Delphinium Pylzowi. (*Gfl.* t. 879.) H. per. with roundish deeply 3–5-lobed l., the lobes again 3-toothed or lobed, light green; petioles long, hairy. Stems 8–12 in. high, hairy, divaricately branched, few-flowered. Fl. 1 in. in diameter; sep. violet, shorter than the slender spur; pet. black, the lower bifid. Carpels 5, silky-hairy. North-west China.

Delphinium tatsiense. (*W. G.* 1896, 27.) H. A species about 2 ft. in height with cobalt-blue fl. China.

Delphinium trolliifolium. (*Gard.* 1889, xxxv. 523.) H. Stems stout, from 2–4 ft. in height, glabrous or slightly hairy: l. long-petioled, 5–7-lobed, the lobes laciniately cleft and toothed, with acuminate segments; raceme loose, few-flowered, with longish pedicels; fl. bright blue, 1-1½ in. broad, the spur as long as the sep. Oregon.

Delphinium viride. (*G. and F.* 1888, 149, 150, f. 29.) H. annual on biennial, with palmately cut and toothed l., and laxly racemose fl., with the sep. and the long stout spur yellowish-green and the pet. deep purple. Chihuahua, Mexico.

Delphinium Zalil. (*G. C.* 1887, ii. 558; *B. M.* t. 7049.) H. annual with branching stem, finely cut dark green l., and long racemes of pale yellow fl. Affghanistan.

Dendrobium aduncum. (*B. M.* t 6784.) Orchidaceæ. S. Stems erect, slender; l. oblong-lanceolate, acute, 2½–3 in. long: fl. lateral, solitary or few in a raceme, 1 in. in diam., pale mauve, with a yellow lip, which is saccate with a slender pointed apex; spur large and gibbous. China.

Dendrobium Ainsworthii. (*F. M.* t. 196.) S. Garden hybrid.

Dendrobium Amblyornidis. (*G. C.* 1878, ix. 332.) S. A bushy species which has obtained its specific name from the use which a bower bird makes of it in nesting. Branches strong but thin. L. lanceolate, acuminate. Fl. small and insignificant, with reflexed lateral sep. and cuneate oblong 2-keeled lip. New Guinea.

Dendrobium Antelope. (*G. C.* 1883, xix. 656.) S. A curious species with long slender stems, and racemes of yellowish fl.: pet. long, antenniform, erect, brown with yellowish outer edges; lip striped and freckled with mauve. Moluccas.

Dendrobium Aphrodite. (*B. M.* t. 5470; *Veitch Man. Dendrob.* 17.) S. [This is the first published name for *D. nodatum*, Lindl.]

Dendrobium Arachnites. (*G. C.* 1896, xx. 7, f. 2.) S. A dwarf species. Pseudobulbs only 3 in. long, fusiform, shining; fl. 1½ in. across, orange-scarlet; sep. and pet. linear; lip pandurate. Burma.

Dendrobium arachnostachyum. (*G. C.* 1877, vii. 334; viii. 38.) S. Raceme several-flowered. 1 ft. long. Fl. large, light green, with the front of the column and 3 keels and the lateral veins of the side lobes of the lip violet. Spur conical, acute, straight. Upper sep. linear-lanceolate; lateral sep. with broader bases. Pet. longer, linear,

acute ; lip trifid, very long ; side lobes abruptly obtuse-angled towards the base ; the middle front lobe lanceolate; there are three keels from the base of the organ to the base of the middle lobe. New Guinea.

Dendrobium atroviolaceum. (*G. C.* 1890, vii. 512 ; *Gfl.* 1890. 450 ; *O.* 1890, 130 ; *B. M.* t. 7371.) S. Allied to *D. macrophyllum*, differing in its brighter colours, and the absence of hairs on its fl. New Guinea.

Dendrobium Augustæ-Victoriæ. (*Gfl.* 1894, 115.) S. [*D. veratrifolium*, Lindl.] New Guinea.

Dendrobium aurantiacum. (*G. C.* 1887, ii. 98.) S. Allied to *D. clavatum*, but having long bracts and broader sep. and pet. Stems slender, 1 ft. or more long. L. linear, 2–3 in. long, ¼ in. broad. Racemes short, 1–3-flowered ; fl. uniform, orange. Sep. oblong ; pet. broader ; lip hastate, rough inside, with some linear elevations at the base. Assam.

Dendrobium aureum album. (*Veitch Man. Dendrob.* 20.) S. Fl. very pale, nearly white.

—— Var. **aurantiacum.** (*Veitch Man. Dendrob.* 20.) S. Fl. orange-yellow.

—— Var. **Henshalli.** (*Veitch Man. Dendrob.* 19.) S. This is the plant figured in B. M. t. 4970, as *D. heterocarpum Henshalli*.

—— Var. **philippinense.** (*G. C.* 1880, xiii. 72.) S. A var. with large pallid fl. Lip acute, with a purple blotch under the velvety disk, and orange areas on both sides of the base. East Indies.

Dendrobium barbatulo-chlorops. (*G. C.* 1892, xi. 298.) S. A supposed natural hybrid between the two species indicated in the name.

Dendrobium Bensoniæ album. (*G. C.* 1893. xiii. 580.) S. A var. with longer segments and less colour in the fl. than the type.

—— Var. **xanthinum.** (*G. C.* 1878, x. 45.) S. A var. with white fl., marked on the disk of the lip with yellow.

Dendrobium bigibbum albomarginatum. (*L.* vii. t. 317.) S. A var. with whitish edges to the fl.

Dendrobium bigibbum candidum. (*G. C.* 1878, ix. 168.) S. A pretty var. with white fl. Australia.

—— Var. **superbum.** (*G. C.* 1879. x. 748.) S. A var. with much larger fl., larger and longer pet., very rounded and very deep purple side lobes to lip. and a longer spur than in the type.

Dendrobium bostrychodes. (*G. C.* 1880, xiv. 748.) S. Fl. as large as those of *C. infundibulum*, white, with numerous red warts on the lip and three red blotches at the base of the column ; pet. and lip. wavy. Borneo.

Dendrobium bracteosum. (*G. C.* 1886. xxvi. 809 ; *L.* ii. t. 74.) S. Allied to *D. cumulatum*, remarkable for the bracts being nearly as long as the fl. Fl. grouped in capitate masses, purple with yellow lips, somewhat red on the front margins. Sep. triangular-keeled ; spur about ⅗ the length of the free parts of the lateral sep., rather blunt. Pet. narrower, oblong, acute. Lip nearly spathulate, a little convex on the upper sides, much thicker at the base. New Guinea.

Dendrobium brymerianum histrionicum. (*G. C.* 1888, iii. 104; *O.* 1888, 225 ; *Veitch Man. Dendrob.* 25.) S. An autumn-flowering form. Fl. sometimes has a fringe to the lip. Burma.

Dendrobium Burbidgei. (*G. C.* 1878, x. 309.) S. In the way of *D. minax*, but fl. smaller and of a different colour, being yellowish instead of purplish : the pet. are much broader at their ends, and the nerves of the lip nearly contiguous. Sunda Islands.

Dendrobium burfordiense. (*G. C.* 1892, xii. 744.) S. A garden hybrid between *D. linawianum* and *D. aureum*, which are also the parents of *D. dulce*.

Dendrobium capillipes elegans. (*G. C.* 1880, xiii. 743.) S. With very short pale-red pseudobulbs. Fl. as large as those of *D. dixanthum*, of a bright yellow. Lip large dark orange at the base. Burma.

Dendrobium cariniferum lateritium. (*G. C.* 1883, xix. 656.) S. A var. with light yellow sep., white pet., and the lip brick-red with a yellowish front-lobe.

Dendrobium cariniferum Wattii. (*B. M.* t. 6715; *R. H.* 1884, 216.) S. A distinct var. with white fl., having yellow keels and three yellow veins on each side of the lip.

Dendrobium cerinum. (*G. C.* 1879, xii. 554.) S. Raceme of 4–6 fl. Ovaries and pedicels light rose. Sep. and pet. light yellow, shaded with brown; lip light ochre with brown lines; claw with a strong retrorse tooth. Blade oblong with numerous minute teeth on its anterior edge. Malayan Archipelago.

Dendrobium cheltenhamense. (*Gard.* 1893, xliii. 389.) S. A garden hybrid between *D. luteolum* and *D. aureum*.

Dendrobium chloropterum. (*G. C.* 1884, xxii. 648.) S. Not a showy species. Pseudobulbs fusiform. L. narrow, oblong, bilobed at apex. Peduncle laxly few-flowered. Sep. and pet. light green, with red streaks outside, and broken lines of darker colour inside. Lip pale-red, with dark lines; the front lobe with a pale-yellow border. New Guinea.

Dendrobium chlorostele. (*G. C.* 1887, i. 477.) S. Garden hybrid.

Dendrobium chlorostele-xanthocentrum. (*G. C.* 1889, v. 490.) S. Hybrid between the two species indicated by the name.

Dendrobium chrysanthum anophthalum. (*G. C.* 1883, xix. 44.) S. A distinct var. without blotches on the lip.

—— Var. **microphthalmum.** (*G. C.* 1879, xi. 366; *Bull Cat.* 1879, 4.) S. A var. without tubercles on the outside of sep. Pet. slightly serrate, blunt. Lip with almost obsolete fimbriæ, and 2 or 4 pale brown blotches near the base, instead of 2 big dark central ones as in the type.

Dendrobium chryseum. (*G. C.* 1888, iii. 233; *O.* 1888, 166; *Veitch Man. Dendrob.* 28.) S. Stems 1½ ft. high, slender. L. 3–4 in. long, linear-lanceolate. Racemes 2–3-flowered. Fl. rich golden yellow. Sep. oblong, 1½ in. long. Pet. broad, elliptic. Lip orbicular, minutely pubescent, and minutely fringed. Assam.

Dendrobium chrysocephalum. (*G. C.* 1892, xii. 122.) S. Fl. golden-yellow, very similar to *D. viride-roseum*, but with a different lip.

Dendrobium chrysodiscum. (*G. C.* 1887, i. 414.) S. Garden hybrid.

—— Var. **oculatum.** (*Veitch Man. Dendrob.* 87.) S.

Dendrobium chrysolabrum. (*G. C.* 1889, v. 770.) S. [*D. bracteosum*, Reichb. f.]

Dendrobium christyanum. (*G. C.* 1882, xvii. 178.) S. Young shoots covered with dark hairs. Peduncles 1-flowered. Fl. ivory-white, with the base of the column and disk of the lip cinnabar. Chin bluntly angular. Siam.

Dendrobium ciliatum breve. (*G. C.* 1883, xix. 328.) S. Only differs from the type in having short thick stems.

Dendrobium cinnabarinum. (*G. C.* 1880, xiv. 166.) S. Habit of *D. crumenatum*. Sep. bright vermilion. Pet. ochre at base, purple at apex. Lip trifid, ochre, with 3–5 purple lines and a purple area before the apex. Borneo.

Dendrobium cobbianum. (*G. C.* 1881, xvi. 780.) S. Sep. and pet. milk-white, tinged with yellow; lip dark yellow with a cinnabar-orange blotch at its base.

Dendrobium crassinodi-wardianum. (*Veitch Man. Denbrob.* 32.) S. [*D. melanophthalmum*, Reichb. f.]

Dendrobium cruentum. (*G. C.* 1884, xxi. 604; *W. O. A.* t. 174.) S. Fl. very like those of *D. tridentiforme*, but larger. Sep. triangular, acuminate. Pet. linear, acuminate. Lip deeply trifid; side lobes falcate, erect; middle lobe ovate, apiculate, with a large tumid callus with a corrugated anterior surface. Fl. whitish, with the callus and side lobes of the lip cinnabar.

Dendrobium Curtisii. (*G. C.* 1881, xvi. 102.) S. A handsome species with stems like those of *D. devonianum*, and fl. in the way of *D. cumulatum*. Sep. and pet. amethyst. Lip ligulate, acute, with an angle on each side above the middle and a retrorse flat horn at base. Borneo.

Dendrobium Curtisii. (*Sand. Cat.* 1896, 12, f.) G. A garden hybrid between *D. aureum* and *D. Cassiope.*

Dendrobium curviflorum. (*K. B.* 1895, 281.) S. Of the section *Aporum.* Stems 6 in. long; l. lanceolate 1½ in. long; fl. solitary, axillary, 1¾ in. long, white suffused with pink; the lip blotched with yellow. Himalaya.

Dendrobium cymbidioides. (*G. C.* 1896, xix. 581, f. 90.) S. Allied to *D. Cœlogyne.* Pseudobulbs ovate, clustered; l. linear-lanceolate, 6 in. long; scapes 9 in. long, erect, many-flowered; fl. 2 in. across; sep. and pet. narrow creamy-white; lip small, white with purple markings. Java.

Dendrobium dactiliferum. (*G. C.* 1884, xxi. 638.) S. Allied to *D. macrostachyum.* Fl. light ochre, with the margin and calli of the lip brown. Lip with long narrow side lobes, and a square emarginate thick blade, having three thick parallel keels on the disk.

Dendrobium D'Albertisii. (*G. C.* 1878, ix. 366; x. 217, f.) S. Of rather dwarf habit, with curious and pretty fl. Sep. whitish; pet. spirally twisted, long, thrown back, pale green. Lip whitish with three red stripes. New Guinea.

Dendrobium dalhousieanum luteum. (*G. C.* 1891, ix. 728.) S. A straw-yellow-flowered form. [*D. pulchellum*, Roxb. var.] India.

—— Var. **rossianum.** (*G. C.* 1882, xvii. 796.) S. A large-flowered buff-coloured var. having very few purple-brown streaks on the stems. Burma.

Dendrobium Dearei. (*G. C.* 1882, xviii. 361; *W. O. A.* t. 20.) S. Multisulcate stems a span high, with numerous racemes of white fl., with a yellow base to the lip. *D. superbum Dearei* (*Fl. and P.* 1882, 75) is probably the same plant.

Dendrobium densiflorum clavatum. (*G. C.* 1892, xi. 394.) S. A var. with clavate pseudobulbs and white and yellow fl. Shan States.

Dendrobium devonianum candididulum. (*G. C.* 1876, v. 654.) S. A var. with the purplish markings, usual on the tips of pet. and lip, totally wanting.

Dendrobium devonianum elliottianum. (*G. C.* 1876, v. 756.) S. Apices of the pet., sep., and lip dark purplish; the lip with three purple streaks at its base, and the nerves of the ciliate-toothed pet. of the same colour.

Dendrobium dominianum. (*G. C.* 1878, ix. 202.) S. Garden hybrid between *D. linawianum* and *D. nobile.*

Dendrobium Donnesiæ. (*G. C.* 1895, xvii. 402.) S. A supposed natural hybrid between *D. formosum* and *D. infundibulum.*

Dendrobium doreyanum. (*L'Hort. Int. Cat.* 1888-9, 48.) S. New Guinea.

Dendrobium dulce. (*G. C.* 1892, xi. 214.) S. A garden hybrid between *D. linawianum* and *D. aureum.*

Dendrobium Edithæ. (*G. C.* 1895, xvii. 337.) S. A garden hybrid between *D. aureum* and *D. nobile nobilius.*

Dendrobium Endocharis. (*G. C.* 1876, v. 298.) S. Garden hybrid.

Dendrobium Erythropogon. (*G. C.* 1885, xxiv. 198.) S. Allied to *D. Loweii.* Sep. partly pale ochre, partly ochre; pet. oblong, undulate; lip with broad blunt rectangular side lobes, white, edged with crimson, and an obcordate wavy serrulate front lobe, with seven thick crimson keels on the disk, the two outer ones with short crimson hairs on each side. Sunda Islands.

Dendrobium euosmum. (*G. C.* 1885, xxiii. 174.) S. A garden hybrid between *D. Endocharis* and *D. nobile.*

—— Var. **leucopterum.** (*G. C.* 1892, xi. 343.) S. A garden hybrid between *D. nobile* and *D. Endocharis.*

—— Var. **virginale.** (*G. C.* 1895, xvii. 337.) S. A garden hybrid between *D. Endocharis* and *D. nobile intermedium.*

Dendrobium Fairfaxii. (*G. C.* 1889, v. 798.) S. A small plant; pseudobulbs 3–4 in. long; racemes terminal, 4 in. long; lip white, green, and purple. New Hebrides.

Dendrobium Falconeri albidulum. (*G. C.* 1876, v. 688.) S. A var. with white fl.; tips of the pet. pallid; lip pallid, purplish at apex, yellow at base.

—— Var. **giganteum.** (*W. O. A.* t. 257.) S. A robust var. with large blush-white fl. tipped with rosy-purple on the sep., pet., and lip: the base of the lip with two large maroon blotches bordered with orange-yellow. North India.

—— Var. **robustum.** (*G. C.* 1879, xii. 70.) S. This only differs from the type in having much thicker scarcely constricted stems.

Dendrobium Farmeri aureum. (*W. O. A.* t. 99.) S. A var. of dwarf habit, and free-flowering, with rich racemes of clear yellow fl.; the lip orange yellow. Moulmein, Burma.

Dendrobium findleyanum. (*G. C.* 1877, vii. 334.) S. In the way of *D. Aphrodite*. Stem with flat oblong-pyriform articulations. L. linear-lanceolate. Racemes lateral, 1–2-flowered. Fl. white, with the tips of the sep. and pet. purple; lip purple with a yellow disk, nearly circular, wavy; sep. lanceolate; pet. oblong, acute; chin angular, well-developed. Burma.

Dendrobium formosum Berkeleyi. (*G. C.* 1883, xix. 110, 210; *Fl. and P.* 1883, 42.) S. A var. with scentless fl., more funnel-shaped than in the type; pet. also narrower and shorter. Andaman Islands.

Dendrobium friedricksianum. (*G. C.* 1887, ii. 648.) S. Allied to *D. signatum*. Stems rather thick, furrowed, spotted with purple on the sheaths. Racemes few-flowered. Fl. light yellow, the lip with a darker yellow centre marked with a dark purple blotch; in form the lip is oblong, subacute, rough on the disk, raised at the base in a clavate line which is tomentose at its apex. Siam.

Dendrobium fuscatum. (*B. M.* t. 6226.) S. Allied to *D. fimbriatum* and *D. chrysanthum*, with cylindric grooved leafy stems, 2–3 ft. long. L. 4–6 in. long, lanceolate, acuminate, striate, with short sheaths. Racemes lateral, several-flowered. Fl. deep orange, lip rather paler with two dark purple-brown spots at the base. [*D. Gibsoni*, Paxt.] Eastern Himalaya.

Dendrobium fuscum. (*G. C.* 1879, xii. 680.) S. A robust species, 2–6 ft. high, with reddish-brown fl. Australia.

Dendrobium fytchianum roseum. (*G. C.* 1887, i. 209; *Williams Cat* 1887, 22.) S. A var. with rose-coloured sep. and pet., and the side lobes and base of front lobe of lip deep crimson-purple. Burma.

Dendrobium galliceanum. (*L.* vi. t. 241.) S. A beautiful plant, very similar to *D. thyrsiflorum*, with a large and dense raceme of white fl., with the lip of a bright clear yellow. Pet. much broader than the sep., slightly crisped on the margins. Lip very broadly cordate-ovate, with a fringed margin.

Dendrobium Gemma. (*O. R.* 1895, 73.) S. A garden hybrid between *D. aureum* and *D. superbum Huttoni*.

Dendrobium glomeratum. (*K. B.* 1894, 155; *G. C.* 1894, xv. 653, f. 80.) S. Allied to *D. cumulatum*, but larger in fl. Pseudobulbs 2½ ft. long; fl. in short dense axillary racemes. Bracts large, imbricating; sep. and pet. bright rose colour; lip orange. Moluccas.

Dendrobium glomeriflorum. (*G. C.* 1895, xviii. 206.) S. Fl. small and insignificant, pale rose, 1–5 on each stem, in dense clusters.

Dendrobium Goldiei. (*G. C.* 1878, ix. 652.) S. Very closely allied to *D. superbiens*, but not so robust, with l. 3–4 in. long and ½ in. wide, ligulate, acute. The keels of the lip cease at the middle of the acute middle lobe in semi-oblong lamellæ, covered with several rows of teeth, of a purplish-violet colour. North Australia.

Dendrobium gracilicaule. (*B. M.* t. 7042.) S. A near ally of *D. kingianum*, differing chiefly in the colour of the fl. which are yellow with red spots. Australia.

Dendrobium griffithianum. (*G. C.* 1877, vii. 590.) S. In the way of *D. Pulpebræ*, having small very acute thick l., very obscure narrow bracts, and a lax infl. of yellow fl. with an entire spur, not constricted before its apex. Burma.

Dendrobium Guibertii. (*Veitch Man. Dendrob.* 48.) S. This is the *D. Guibertii*, Carr. now referred as a var. to *D. griffithianum*.

Dendrobium hamatum. (*K. B.* 1894, 183.) S. Pseudobulbs slender, 2 ft. long. L. oblong, acuminate, 5 in. long. Racemes axillary, many-flowered. Fl. 1½ in. wide, sep. and pet. pale yellow with lines of purple dots; lip pandurate, yellow with a purple stain on the front lobe. Cochin China.

Dendrobium harveyanum. (*G. C.* 1883, xix. 624.) S. Fl. small, deep yellow, with two orange spots on the lip; the pet. and lip are strongly fringed, which character well marks this species. Burma.

Dendrobium hercoglossum. (*G. C.* 1886, xxvi. 487.) S. Allied to *D. aduncum*, with slender stems having lateral racemes at the top. Fl. similar to those of *D. aduncum*, but the spur more oblique; sep. and pet. delicate mauve; lip white with a mauve-purple recurved apex, the basal part is cup-shaped, hairy inside, and separated from the front part by a transverse fringe of hairs. Malacca.

Dendrobium Hildebrandii. (*K. B.* 1894, 182; *B. M.* t. 7453.) S. Allied to *D. tortile*; pseudobulbs 2 ft. long; l. 5 in. long, 1½ in. wide; racemes numerous, axillary. Fl. 3 in. across, the sep. and pet. twisted and coloured pale dull yellow; lip short and roundish, orange. Some variation in colour is shown among cultivated plants. Burma.

Dendrobium holmesianum. (*G. C.* 1896, xix. 401.) S. A garden hybrid between *D. dominianum* and *D. schneiderianum*.

Dendrobium Hughii. (*G. C.* 1882, xvii. 764.) S. Stems thin; l. linear, acuminate; fl. white with a yellow wart on the disk of the lip. Singapore.

Dendrobium illustre. (*O. R.* 1895, 243; *J. of H.* 1895, xxx. 561, f. 99.) S. A garden hybrid between *D. chrysotoxum* and *D. dalhousieanum*.

Dendrobium inauditum. (*L.* ii. t. 66; *G. C.* 1886, xxvi. 552; 1887, i. 45; 1895, xviii. 15, f.) S. A singular species, with tufted fusiform-ovate green pseudobulbs, narrowed at the apex to a slender brownish leaf-stalk, 3-4 in. long, bearing an elliptic obtuse l., from the base of which arise two fl., after the manner of a *Pleurothallis*. Sep. and pet. 1½ in. long, narrow, linear-lanceolate, pale yellow. Lip with square obtuse-angled side-lobes, and a lanceolate acuminate front-lobe, pale ochre, spotted with brown. New Guinea.

Dendrobium inflatum. (*K. B.* 1895, 6.) S. Of the section *Pedilonium*. Pseudobulbs slender, 6 in. long; l. 1 in. long; racemes short, few-flowered. Fl. 1 in. long, white with a yellow blotch on the lip. Java.

Dendrobium infundibulum carneopictum. (*G. C.* 1885, xxiv. 360.) S. A var. having a flesh-coloured hue on the lip, and a thick central line and a few streaks on the sides.

—— Var. **jamesianum.** (*Veitch Man. Dendrob.* 50.) S. [This is *D. jamesianum*, Reichb. f.]

—— Var. **ornatissimum.** (*G. C.* 1883, xix. 656.) S. A var. with large waxy fl., having brown stripes and spots on the lip instead of yellow.

Dendrobium ionopus. (*G. C.* 1882, xviii. 808.) S. A pretty species with clustered racemes of deep yellow fl., having two purple blotches on the lip; ovaries and peduncle mauve. Burma?

Dendrobium jennyanum. (*G. C.* 1896, xx. 329.) S. Allied to *D. undulatum* from which it differs in the size of the plant and the fl., which have plane segments and a broad three-lobed lip. The colour is yellowish outside, brown inside and varnished. Australia?

Dendrobium Johannis semifuscum. (*G. C.* 1883, xix. 368.) S. Brown pet., yellow sep., and lip with reddish-brown borders and lines on the side-lobes.

Dendrobium kingianum album. (*W. O. A.* t. 332; *G. C.* 1888, iii. 801.) S. A white-flowered var. Australia.

Dendrobium lansbergeanum. (*L'Hort. Int. Cat.* 1888–9, 49.) S. New Guinea.

Dendrobium leeanum. (*G. C.* 1891, x. 591, 640, f.) S. A species with tall slightly compressed pseudobulbs: not unlike *D. superbiens* in habit and form

of fl. Fl. white, mottled with rose, and tinged with green at the base of the lip. New Guinea.

Dendrobium leechianum. (*G. C.* 1882, xvii. 256, f. 35; *Fl. and P.* 1882, 52; *R.* ser. 2, t. 50.) S. A garden hybrid between *D. aureum* and *D. nobile*.

Dendrobium leucochlorum. (*G. C.* 1879, xi. 202.) S. Pseudobulbs stalked, thin, cylindric, shining, with pellucid somewhat ribbed sheaths. Fl. solitary or in pairs, white; sep. triangular; pet. a little broader; lip 3-lobed; side lobes oblong, abrupt in middle, with radiating red veins inside and also outside, where the surface is greenish; front lobe protracted, broad, retuse; disk between side lobes with short muriculi; spur extinguisher-shaped, nearly as long as the stalked ovary, bent in the middle. Burma.

Dendrobium leucolophotum. (*G. C.* 1882, xviii. 552; *L.* vii. t. 291.) S. Near *D. barbatulum*, but with larger pseudobulbs and a long lax raceme of larger white fl.; lip trifid, its side-lobes triangular, rounded, its front-lobe long, linear-ligulate, acute. Malay Archipelago.

Dendrobium leucopterum. (*G. C.* 1886, xxv. 488.) S. A garden hybrid between *D. endocharis* and *D. nobile*, raised from the same seed pod as *D. euosmum*.

Dendrobium lineale. (*G. C.* 1889, vi. 381.) S. Resembles *D. canaliculatum*; pseudobulbs 2 ft. high: racemes 1 ft. long; fl. white with purple spots on the lip. New Guinea.

Dendrobium linearifolium. (*G. C.* 1884, xx. 618.) S. Stems slender, shiny, branched. L. linear, bidentate. 2 in. long, 2 in. broad, twisted. Fl. arising singly from tufts of leaf-sheaths, white, with purple-mauve lines on lateral sep. and lip; upper sep. small, oblong, acute; pet. small, nearly rhombic; lip cuneate, dilated, retuse or 3-lobed at apex, having a muriculate thick yellow area at the front of the middle lobe. Sumatra.

Dendrobium Linguella. (*G. C.* 1882, xviii. 552.) S. Small-flowered species much in the way of *D. aduncum*, differing in having double lamellar appendages at the base of the lip. Fl. probably rosy with a yellow-tipped lip. Malay Archipelago.

Dendrobium lituiflorum candidum. (*G. C.* 1880, xiii. 586.) S. A var. with white fl. Assam, &c.

—— Var. **Freemani.** (*G. C.* 1877, viii. 744.) S. A var. with the lip covered with denser hairy bodies, and with the zone yellowish instead of white.

—— Var. **robustum.** (*G. C.* 1877, vii. 781.) S. A var. only differing from the type in its much thicker stems. Burma.

Dendrobium Lowii pleiotrichum. (*G. C.* 1885, xxiv. 424.) S. A var. wanting the red lines on the lip, and having short hairs on the basal lobes.

Dendrobium lubbersianum. (*G. C.* 1882, xvii. 460.) S. Fl. yellowish-white, much like those of *D. curviflorum*. Lip trifid, with large rounded side lobes, and a semi-ovate blunt finely-toothed middle lobe, covered with styliform processes. There is a cinnabar blotch on the side lobes and at the base of the middle lobe. Burma.

Dendrobium luteolum chlorocentrum. (*G. C.* 1883, xix 340, f. 48; *Williams' Cat.* 1883, 26.) S. A var with pale primrose fl. having greenish hairs on the disk of the lip.

Dendrobium lutwycheanum. (*O. R.* 1894, 203.) S. A garden hybrid between *D. wardianum* and *D. splendidissimum grandiflorum*.

Dendrobium Macfarlanei. (*Veitch Cat.* 1890, 10.) S. Pseudobulbs less than 1 ft. high; raceme 9–12-flowered; fl. 4 in. across, pure white, marked with purple on the sides and base of the lip. [*D. niveum*, Rolfe, *G. C.* 1891, ix. 104.] New Guinea.

Dendrobium macrophyllum giganteum. (*R. H.* 1886, 348.) S. Fl. large, solitary or geminate. 4 in. in diam., the sep. and pet. of a rosy mauve tinted with lilac, the eyed and fringed lip being rosy-purple. [*D. superbum*, Reichb. f. var. *giganteum*.] Philippine Islands.

—— Var. **stenopterum.** (*G. C.* 1888, iii. 393; *H. G.* 1888, 229.) S. A var. with narrow triangular side lobes to the lip, which is yellow, with some pallid spots and markings on the middle lobe, and a few brown lines on the side

lobes. The sep. and pet. are ochre-yellow, dotted on the outside with dark reddish-brown. It also occurs with yellow fl.

Dendrobium melanodiscum. (*R.* ser. 2, t. 12 ; *G. C.* 1887, i. 414.) S. Garden hybrid.

Dendrobium melanophthalmum. (*G. C.* 1886, xxv. 426.) Stems nodose. Fl. like those of *D. crassinode*, var. *barberianum*, but with two dark eye-spots. Supposed to be a natural hybrid between *D. wardianum* and *D. crassinode*.

Dendrobium mettkeanum. (*G. C.* 1894, xvi. 306.) S. Very near to *D. nitidissimum*, with fl. like those of *D. treacherianum*.

Dendrobium micans. (*G. C.* 1879, xi. 332.) S. A garden hybrid between *D. wardianum* and *D. lituiflorum*.

Dendrobium mirbelianum. (*L.* v. t. 215.) S. A distinct plant with stout stems, 18–20 in. long, elliptic coriaceous l., and erect racemes bearing about a dozen moderate-sized fl. Sep. and pet. narrow, lanceolate, acute, greenish-yellow with darker lines. Lip with oblong side lobes of a greenish-yellow, marked with brown lines, enclosing the column, and an ovate acute front-lobe with a pale disk, and borders veined with brown. New Guinea.

Dendrobium mohlianum. (*G. C.* 1877, vii. 139.) S. Somewhat in the way of *D. thyrsoides*. Stem slender, with black punctate sheaths. L. linear-ligulate, apiculate. Racemes compact : bracts semi-ovate. Fl. cinnabar ; sep. unequally triangular ; pet. oblong, subacute ; lateral sep. extended in an ample spur ; lip. dilated and slipper-shaped at apex, minutely fringed. Fiji.

Dendrobium Moorei. (*G. C.* 1878, x. 139.) S. Pseudobulbs slender, bearing four oblong acute bidentate l., and an infl. of 5–10 white fl. ; sep. and pet. narrow and connivent : spur just equalling the ovary : lip narrow, linear-lanceolate, acuminate, with a triangular blunt lobe on each side, and a fleshy callosity between them. Australia.

Dendrobium moschatum Calceolaria. (*Veitch Man. Dendrob.* 62.) [A synonym of *D. moschatum*, var. *cupreum*, Williams ; *D. Calceolaria*, Carey.]

Dendrobium Murrayi. (*O. R.* 1895, 167.) S. A garden hybrid between *D. nobile* and *D. albosanguineum*.

Dendrobium murrhiniacum. (*G. C.* 1888, iii. 554 ; *H. G.* 1888, 308.) S. Garden hybrid.

Dendrobium nobile album. (*G. C.* 1884, xxi. 338.) S. A trifling var. with very pale edges to the sep., pet., and tip of the lip.

—— Var. **Amesiæ.** (*O. R.* i. 115.) S. A var. with pure white sep. and pet. and a large richly-coloured lip.

—— Var. **ballianum.** (*G. C.* 1893, xiii. 322 ; *O. R.* i. 115.) S. A var. with white segments, tipped with pale pink instead of purple.

—— Var. **candidulum.** (*L.* x. t. 480.) S. A var. with white sep. and pet. ; lip purple, margined with white.

—— Var. **cooksonianum.** (*G. C.* 1885 xxiii. 692 ; *Veitch Man. Dendrob.* 64, f.) S. A var. with the middle area of the pet. of a very deep purple, and their tips with purple borders ; the bases of the pet. are hastate, thickened and velvety in the middle.

—— Var. **elegans.** (*Veitch Man. Dendrob.* 64.) S. A large-flowered form with broader pet. white at the base, and the lip with a pale yellow zone around the maroon-coloured disk and the apical margin rosy-purple.

—— Var. **formosanum.** (*G. C.* 1883, xix. 432.) S. A long-stemmed var. with white fl., having the pet. and lip tipped with mauve-purple ; ovaries mauve. Formosa.

—— Var. **nobilius.** (*G. C.* 1882, xvii. 366 ; *W. O. A.* t. 214.) S. A var. with large fl. of a resplendent purple, the lip being very dark and with fine mottlings.

—— Var. **sanderianum.** (*G. C.* 1888, iii. 554 ; *R.* ser. 1, t. 58.) S. A variety with bright purple sep. and pet., white at their base. Lip with a large dark blotch on the disk, rosy-purple on each side of it, and a white area in front with purple veins.

—— Var. **schneiderianum.** (*G. C.* 1884, xxi. 577.) S. A var. having a yellow hue on the lip. and a deep mauve mark at its base.

Dendrobium nobile schrœderianum. (*Veitch Man. Dendrob.* 64.) S. A large-flowered var. with broad segments; sep. and pet. white, sometimes tipped with amethyst-purple. Lip with a rich maroon disk bordered with pale yellow, and a white margin.

—— Var. **tollianum.** (*G. C.* 1884, xxi. 445.) S. A var. in which the pet. are bordered with purple. Lip spotted and streaked with purple on the disk and at the base.

Dendrobium nycteridoglossum. (*G. C.* 1886, xxvi. 616.) S. A small-flowered species with the habit of *D. Serra*. Fl. produced in fascicles on the upper and ultimately leafless part of the stem, green, striped with very dark red on the sep. and pet., and with a dark green spot on the disk of the lip, which has broad triangular side lobes, and a very short retuse central lobe. New Guinea.

Dendrobium obrienianum. (*G. C.* 1892, xi. 266.) S. Fl. small yellowish-green. Philippine Islands.

Dendrobium owenianum. (*G. C.* 1893, xiii. 206, 226; *O. R.* i. 86.) S. A garden hybrid between *D. linawianum* and *D. wardianum*. These are the parents of *D. chlorostele*, Reichb. f.

Dendrobium pardalinum. (*G. C.* 1885, xxiv. 230.) S. Much resembling *D. Macraei*. Stem scandent, covered with narrow one-leaved pseudobulbs. Sep. and pet. ochre-coloured, with dark purple spots. Lip with a very long stalk, having two long wavy plicate keels; front lobe pentagonal, both its sides prolonged backwards and producing a sagittate appearance.

Dendrobium Parthenium. (*G. C.* 1886, xxiv. 489; *Bull Cat.* 1886, 8.) S. A tall plant with thin stems; l. 1½ in. long; racemes 2-flowered; fl. white with a purple blotch at the base of the lip. Sep. lanceolate-triangular with obscure keels. Pet. oblong, obtuse, longer than the sep. Borneo.

Dendrobium percnanthum. (*G. C.* 1886, xxvi. 70; *Cat. Comp. Cont. d'Hort* 1886, 3.) S. Species with strong shining stems, and numerous racemes of pale yellow fl. with a white lip having the mid lobe and borders of the upper part yellow, and with brown and purple keels. Sep. triangular. Chin blunt. Pet. linear, longer than the sep., turned backwards. Lip ligulate, trifid at the apex, side lobes blunt, rhomboid, mid-lobe ovate, apiculate Moluccas.

Dendrobium Petri. (*G. C.* 1877, vii. 107.) S. In the way of *D. Farmeri*, but smaller. Stems 1 ft. or more high, shining, with small l. and upright racemes of white fl. The lip is ligulate, acute, with 2 angular teeth before the base, and a nearly square callus between the teeth. Polynesia.

Dendrobium Phalænopsis. (*G. C.* 1880, xiv. 38; *B. M.* t. 6817.) S. Leafy fl.-stems 20 in. long, bearing about 15 fl. of a lilac colour, 2–2½ in. in diam. Sep. lanceolate, acute. Pet. obovate, acute. Lip 1 in. long, acute, with broad wings, and spurred at the base. New Guinea, &c.

—— Var. **hololeucum.** (*G. C.* 1895, xviii. 192, 396, f. 72.) S. A var. with pure white fl.

—— Var. **rothschildianum.** (*G. C.* 1892, xii. 668.) S. Does not appear to differ in any way from the type.

—— Var. **statterianum.** (*R.* ser. 2, t. 7.) S. Fl. smaller and darker in colour than the type.

Dendrobium pitcherianum. (*G. C.* 1888, 392; *H. G.* 1888, 229.) S. Stems like those of *D. nobile*. Sep. oblong, obtuse, pale rose with purple tips. Pet. broader, with a deep purple tip and rosy mid-line. Lip cordate-oblong in outline, involute at the base, with a flat border, hairy, light yellow, with a purple tip and lines on each side of the thickened mid-line.

Dendrobium Pogoniates. (*G. C.* 1886, xxvi. 199.) S. A miniature plant of botanical interest, with fusiform stems 1 ft. high, linear-lanceolate l. and small yellowish fl. with an orange lip. Sep. lanceolate, acute; spur cylindric, retuse. Pet. cuneate-oblong; lip with a long mid-lobe, bearded North Borneo.

Dendrobium polycarpum. (*G. C.* 1884, xx. 492.) S. Stems tall and slender. Fl. in lax racemes, yellowish. Lip trifid with 5 parallel keels on the disk, and branched keels on the side lobes, which have purple-red borders. Java or Sumatra.

Dendrobium polyphlebium. (*G. C.* 1887, i. 702; *W. O. A.* t. 229.) S. Habit and fl. of *D. Pierardi*, but the sep. and pet. are broader, of a bright rosy colour; lip rounded, slightly fringed and hairy, the basal part pale with three keels and numerous radiating purple veins, the disk rich purple, and the margin whitish or pale yellow. [*D. rhodopteryyium*, Reichb. f.] Burma.

—— Var. **Emerici.** (*G. C.* 1887, ii. 242.) A var. with a white mid-line on the back of the lateral sep. The dark blotch on the front of the lip is interrupted by an amethyst-coloured bar, and the front margin is white, changing to straw-colour. Burma.

Dendrobium porphyrogastrum. (*Veitch Man. Dendrob.* 90.) S. Garden hybrid.

Dendrobium præcinctum. (*G. C.* 1877, vii. 750.) S. Stems narrow, erect, dark, furrowed. L. lanceolate sub-bidentate. Fl. ½ in. in length, pale ochre with dark purplish limb. Lip trifid, sulphur-yellow, orange in front, the central lobe velvety and 3-keeled.

Dendrobium profusum. (*G. C.* 1884, xxi. 510.) S. Habit like that of *D. superbiens*, but stem thinner; fl. in racemes, yellowish-green, with purple at the base of the sep. and pet., and purple dots on the pet.; lip yellow, with a dark spot on the middle, pandurate, very broad in the front, serrulate and wavy. Philippine Islands.

Dendrobium purpureum candidulum. (*G. C.* 1887, ii. 70; *L.* iii. t. 98.) S. A var. with white fl., tipped with green on the sep.

—— Var. **Moseleyi.** (*G. C.* 1884, xxi. 604.) S. A form with fusiform stems, 6–9 in. long, and lateral clusters of small tubular white fl. tipped with green. Moluccas.

Dendrobium quadrilobum. (*K. B.* 1896, 44.) S. Of the section *Cadetia*, with creeping stems, short oblong one-leaved pseudobulbs and solitary terminal pale green fl. 1 in. across. New Guinea.

Dendrobium revolutum. (*B. M.* t. 6706.) S. A rather remarkable species with terete stems 1 ft. high, furnished with numerous oblong l. 1½–2 in. long, and moderately small axillary whitish fl., with a brownish median stripe on the lip; sep. and pet. all directed upwards and recurved. Malay Peninsula.

Dendrobium rhodostomum. (*G. C.* 1876, v. 795; 1885, xxiii. 472, f.) S. Hybrid between *D. Huttoni* and *D. sanguinolentum*.

Dendrobium Rimanni. (*G. C.* 1882, xviii. 680; *Fl. and P.* 1883, 10.) S. Stems cylindric or fusiform; l. broadly oblong, coriaceous; fl. as large as those of *D. speciosum*. Lateral sep. yellow striped with purple outside, falcate and bent downwards. Pet. yellow, spathulate, obtuse, longer than the sep. Lip white, with purple reticulations. Moluccas.

Dendrobium robustum. (*K. B.* 1895, 33.) S. Allied to *D. mirbelianum*, but with less acute segments and smaller bracts. Pseudobulbs 2 ft. long; fl. yellowish-green with purple lines. New Guinea.

Dendrobium rœblingianum. (*O. R.* i. 211.) S. A garden hybrid between *D. Ruckeri* and *D. nobile*.

Dendrobium Rolfeæ. (*G. C.* 1892, xi. 522.) S. A garden hybrid between *D. primulinum* and *D. nobile*.

Dendrobium rubens. (*G. C.* 1893, xiii. 226.) S. A garden hybrid between *D. lecchianum* and *D. nobile nobilius*.

Dendrobium rutriferum. (*G. C.* 1887, ii. 746; *L.* iii. t. 119.) S. Stems slender, furrowed. Fl. in short capitate racemes, rose-coloured, about the size of those of *D. secundum*. Sep. triangular, obtuse. Pet. spathulate, obtuse. Lip oblong-pandurate, with inflexed borders, saccate and denticulate at the apex, and having a transverse emarginate linear crest in front of the base. New Guinea.

Dendrobium sanderianum. (*K. B.* 1894, 155.) S. Like *D. Dearei*, but with larger fl. and the lip stained with purple instead of green at the base; fl. in axillary clusters of two or three. Borneo.

Dendrobium sanguineum. (*G. C.* 1895, xviii. 292.) S. Belonging to the section *Claripes*, with slender stems 3 ft. long and small axillary crimson fl. Borneo.

Dendrobium scabrilingue hedyosmum. (*G. C.* 1880, xiii. 616.) S. A change of name for *D. albo-viride*.

Dendrobium schneiderianum. (*G. C.* 1887, i. 209; *W. O. A.* t. 411.) S. Garden hybrid.

Dendrobium secundum niveum. (*G. C.* 1882, xvii. 733.) S. A distinct var. with fl. white except at the tip of the lip, which is orange.

Dendrobium signatum. (*G. C.* 1884, xxi. 306.) S. Near *D. Bensoniæ*. Sep. and pet. ligulate, acute, reflexed, whitish. Lip sulphur-yellow, with a brown blotch, shouldered at the base. In the middle is a sharply defined triangular body, blunt at the sides. Siam.

Dendrobium Smilliæ. (*G. C.* 1879, xi. 106.) S. A species with a short rich raceme. Fl. whitish with a rosy-purple hue over the ovary, chin, and base of sep., which have dark green tips; lip ligulate-pandurate, boat-shaped, its apex green, concave, with an angle on each side and marginate in the middle, and with a transverse membranous keel above the middle. North Australia.

Dendrobium speciosissimum. (*O. R.* 1895, 119.) S. Allied to *D. formosum*. Pseudobulbs 5–6 ft. high; fl. as in *D. formosum*, but with a deep orange-red blotch on the lip. Borneo.

Dendrobium speciosum bancroftianum. (*G. C.* 1881, xv. 782.) S. A var. having a light sulphur-coloured lip, minutely dotted with purple at the base, and with a dark yellow middle keel and line. Queensland.

Dendrobium sphegidoglossum. (*G. C.* 1888, iv. 179.) S. Stems spindle-shaped, about 9 in. high; l. narrow oblong, obtuse; fl. rather small, yellowish white. Upper sep. lanceolate, acute; lateral sep. elongate-triangular, acute. Pet. lanceolate, obtuse; lip narrow, 3-lobed, fringed with curled hairs, with an orange-red tip and some red veins on the sides. [*D. stuposum*, Lindl.] Burma; Siam.

Dendrobium splendidissimum. (*G. C.* 1879, xi. 298; *J. H. S.* 1892, 438, f.) S. Garden hybrid between *D. aureum* and *D. nobile*.

—— Var. **grandiflorum.** (*Veitch Man. Dendrob.* 91.) S. Garden hybrid.

Dendrobium Stratiotes. (*G. C.* 1886, xxv. 266; xxvi. 176, 177, f. 34; *Ill. H.* 1886. t. 602; *L.* i. t. 43; *Cat. Comp. Cont. d'Hort.* 1886, 4.) S. A remarkable species, with long fusiform pseudobulbs, rather short oblong l., and numerous racemes of odd-looking fl. of fair size. Sep. lanceolate, acuminate, recurved, ivory white. Pet. longer, linear, twisted, quite erect, pale green. Lip cream-coloured, with violet veins, 3-lobed; front lobe ovate acute. Sunda Isles.

Dendrobium Strebloceras. (*G. C.* 1886, xxv. 266; *Cat. Comp. Cont. d'Hort.* 1886, 4; *L.* iii. t. 124.) S. Allied to *D. Stratiotes*, but with smaller fl. The sep. and pet. are similar, chin narrower, the side lobes of the lip nearly square, obtuse angled, the isthmus well developed, and the front lobe nearly triangular; there are five keels on the median area. Sunda Isles.

—— Var. **rossianum.** (*L.* iii. t. 124; *B. T. O.* 1888, 92; *G. C.* 1888, iii. 72; *L'Hort. Int. Cat.* 1888–9. 43.) S. A var. with white fl., the pet. pale green and the lip and sep. changing to yellowish. New Guinea.

Dendrobium striatum. (*G. C.* 1892, xii. 566.) S. A garden hybrid between *D. japonicum* and *D. dalhousieanum*.

Dendrobium stricklandianum. (*G. C.* 1877, vii. 749.) S. Stem thin, dark green, shining. L. oblong, apiculate, nearly 2 in. long, ½–¾ in. broad. Fl. very small, pale yellow, with or without three purplish blotches on the 3-lobed lip. Lateral teeth of column violet, and there are several reddish spots under the stigmatic hollow. Japan.

Dendrobium strongylanthum. (*G. C.* 1878, ix. 462.) S. With slender stem 1 ft. high, with narrow brown sheaths bearing dense lateral infl. towards the top. Fl. rather small, yellowish-green, with the bases of the sep. very dark violet-brown, the pet. spotted with similar small spots, the margin of the lip and apex of its callus even darker, and many small freckles outside of it. Burma.

Dendrobium subclausum. (*K. B.* 1894, 362.) S. A species with slender pseudobulbs 1½ ft. long, oblong l. 1 in. long and short racemes bearing a few fl. ¾ in. long and coloured brilliant orange. Moluccas.

Dendrobium sulcatum polyanthum. (*G. C.* 1887, i. 607.) S. A well-developed condition.

Dendrobium superbiens. (*G. C.* 1876, vi. 516; *W. O. A.* t. 312.) S. With numerous large purple fl. something in the way of *D. bigibbum*, but with much longer and narrower pet., the lateral lobes of lip with numerous asperities, and the middle lobe differing in bearing five equal ridges. North-east Australia.

Dendrobium superbum Burkei. (*G. C.* 1884, xxi. 306.) S. A fine white-flowered var. with two blush-rose areas on the base of the disk of the pale yellow lip.

Dendrobium tetrachromum. (*G. C.* 1880, xiii. 712.) S. Fl. white. Lip rather long, narrow, washed with ochre-yellow before the point; and with a dark purple blotch at the base of the median lobe; the back of the chin is green. Borneo.

Dendrobium thyrsiflorum Lowii. (*G. C.* 1896, xix. 593.) S. Fl. creamy-white; lip narrow, spoon-shaped and streaked with yellow.

Dendrobium tipuliferum. (*G. C.* 1877, vii. 72.) S. L. narrow. Stem very long, slender, shining. Fl. spider-like, purplish, the sep. and pet. ending in long bristles. Fiji.

Dendrobium transparens album. (*G. C.* 1889, vi. 95.) S. A var. with fl. wholly white.

Dendrobium treacherianum. (*B. M.* t. 6591.) S. A few-flowered species, with crowded ovoid angled pseudobulbs about 2 in. long. L. 2, linear-oblong, 3–4 in. long. Peduncles 2–3-flowered. Fl. 1½ in. long, rose-purple. Borneo.

Dendrobium trigonopus. (*G. C.* 1887, ii. 682.) S. Pseudobulbs fusiform, sulcate, 6–7 in. long, 1–3-leaved. L. oblong, acute, 3–4 in. long, thin, hairy on the back, and when young on both sides. Fl., solitary, golden yellow; ovary 3-angled; sep. oblong, acuminate, keeled; pet. broader and shorter: lip with a rather long claw, and a broad serrulate limb, which has nearly square side lobes, the disk is marked with transverse red lines on each side, and the front lobe has a green central area. Burma.

Dendrobium undulatum fimbrilabium. (*G. C.* 1878, ix. 40.) S. A var. with the angles of the side lobes of the lip fringed, and with a short middle lobe to the lip. North Australia.

Dendrobium vannerianum. (*G. C.* 1887, ii. 72.) S. Garden hybrid.

Dendrobium velutinum. (*K. B.* 1895, 34.) S. Pseudobulbs 5 in. long, fusiform; l. lanceolate, 3 in. long; raceme 1 in. long; fl. like those of *D. cariniferum*, deep yellow; lip velutinous. Burma.

Dendrobium versicolor. (*J. O.* 1895, 153.) S. Allied to *D. megaceras*; sep. at first greenish-yellow, afterwards changing to a pure yellow tinged with purple externally; pet. at first a pale green, afterwards sulphur-yellow; lip passing from a greenish colour into very pale yellow. Assam.

Dendrobium vexabile. (*G. C.* 1884, xxi. 270.) S. Something in the way of *D. Ruckeri*, with light yellow fl., side lobes of the lip with numerous narrow lines, front lobe very wavy, sulphur-yellow, with an orange blotch at each end of the tuft of hairs.

Dendrobium virgineum. (*G. C.* 1885, xxii. 520.) S. Allied to *D. infundibulum*, but with smaller fl. of an ivory white, with two thickened ligular reddish lines running from the base to the middle of the lip. Burma.

Dendrobium wardiano-aureum. (*G. C.* 1889, v. 490.) S. Raised from *D. wardianum* and *D. aureum*.

Dendrobium wardiano-japonicum. (*G. C.* 1892, xi. 343.) S. A garden hybrid between the two species indicated in the name.

Dendrobium wardianum album. (*W. O. A.* t. 450.) S. A white-flowered form with orange-yellow throat to the lip, and rather slender stems. India.

—— Var. **candidum.** (*G. C.* 1876, v. 460.) S. A var. with entirely white fl.

—— Var. **giganteum.** (*W. O. A.* t. 113.) S. [This is identical with the var. *Lowii*.]

—— Var. **Lindeniæ.** (*L.* ix. t. 419.) S. Fl. pure white, save a large blotch of yellow at the base of the labellum.

Dendrobium wardianum Lowii. (*Fl. M.* t. 212.) S. Sep. white, rose-tinted; pet. white, purple-rose at apex; lip with the lower ⅔ yellow with 2 purple-brown eyes, the rest white with a rose apex.

—— Var. **pictum.** (*G. C.* 1894. xv. 298.) S. A var. with pale amethystine sep. crimson at the tips; pet. white with crimson tips, and lip bright in colour.

Dendrobium Wattii. (*G. C.* 1888, iv. 724.) S. [This is the plant figured in the B. M. t. 6715 as *D. cariniferum* var. *Wattii*, Hook. f.]

Dendrobium Wiganiæ. (*G. C.* 1896, xix. 337, 553, f. 84.) S. A garden hybrid between *D. signatum* and *D. nobile*.

Dendrobium wiganianum. (*O. R.* 1894, 143.) S. A garden hybrid supposed to be between *D. harrisianum* and *D. Ashburtoniæ*.

Dendrobium williamsianum. (*G. C.* 1878, ix. 652; *W. O. A.* t. 252.) S. Fl. about as large as *D. dalhousieanum*; sep. whitish; pet. rosy; lip with an irregularly square front lobe of a rich purple, and 3 square upright lamellæ at its top of the same colour, but darker. New Guinea.

Dendrobium xanthocentrum. (*G. C.* 1890, vii. 88; 1895, xvii. 82.) S. A hybrid between *D. findlayanum* and some other species.

Dendrochilum arachnites. (*G. C.* 1882, xvii. 256.) Orchidaceæ. S. L. solitary, cuneate-oblong, acute, undulate, 3 in. long. Peduncle a little longer than the l., with a loose raceme of greenish fl. [*Platyclinis arachnites*, Rolfe.] Philippines.

Dendrochilum cobbianum. (*G. C.* 1880, xiv. 748.) S. L. and pseudobulbs like those of *D. latifolium*, but infl. bent into a zigzag. Sep. and pet. sulphur-coloured; lip flabellate, orange-coloured. [*Platyclinis cobbiana*, Hemsl.] Philippines.

Dendrochilum cucumerinum. (*G. C.* 1884, xxii. 649.) S. Much in the way of *D. uncatum*. Pseudobulbs cucumber-like, at length furrowed, tufted; l. shining; fl. light pellucid green, arranged in graceful distichous racemes. Lip with a toothed brown auricle on each side of the base, running out into a narrow aristate process; middle lobe obcuneate, retuse, apiculate, with two brown stripes on the disk. [*Platyclinis cucumerina*.]

Dendrochilum uncatum. (*G. C.* 1881, xvi. 780.) S. An unattractive species, with a fusiform furrowed pseudobulb. L. petiolate, oblong, lanceolate, acute. Fl. hyaline green in a nodding raceme with two brown stripes on the obscure keels at the base of the lip, and a brown mark at the base of the whitish column. [*Platyclinis uncata*.] Philippines.

Dendropanax argenteum. (*G. C.* 1878, ix. 430.) Araliaceæ. S. Stem fleshy, white-spotted. L. alternate, long-stalked, 1 ft. long, oblong, entire, tapering at base, pointed or rounded at apex, silvery-white above, purple beneath, the veins green. Brazil.

Dendrophylax Fawcetti. (*G. C.* 1888, iv. 533.) Orchidaceæ. S. Much in the way of *D. funale*. A leafless plant with a tuft of long green roots springing from a very short stem, from which arises a scape varying from 2–23 in. long, bearing several fl. 2 in. in diam. Sep. and pet. lanceolate, acute, greenish; lip 2-lobed, white, with a slender spur 7 in. long. West Indies.

Dendroseris macrophylla. (*B. M.* t. 6353.) Compositæ. G. Trunk simple or forked, 10–13 ft. high, leafy at top. L. 8–12 in. long, 6–8 in. broad, oblong or rounded; base cordate; apex obtuse; margin sinuate-toothed. Fl.-heads 2 in. diam., bright yellow, in lax drooping panicles; florets all ligulate. Juan Fernandez.

Dennstædtia davallioides Youngii. (*G. C.* 1877, vii. 367; *Williams' Cat.* 1877, 20; *Veitch Cat.* 1877, 22.) Filices. G. Caudex ¾ in. thick, creeping. Stipes smooth, dark brown below, golden-brown above. Fronds ample, spreading, 7–8 ft. long, ovate in outline, tripinnate, finely cut: pinnules ½–¾ in. long, obliquely oblong, deeply cut into blunt oblong toothed lobes, of which those at the base are largest. Sori small, placed near the base in the sinus of one of the marginal teeth. [*Dicksonia davallioides*, R. Br.] Australia.

Dentaria Killisii. (*G. C.* 1889, vi. 446.) Cruciferæ. H. A hybrid between *D. digitata* and *D. polyphylla*, more robust than either of the parents. Europe.

Dentaria pinnato-digitata. (*G. C.* 1889, vi. 446.) H. An interesting hybrid, intermediate between the two parents. L. pinnate; fl. like those of *D. digitata*. Jura Mountains.

Dentaria polyphylla. (*B. M.* t. 6796.) H. Rhizome 6–10 in. long, covered with thick fleshy scales; stem 1–1½ ft. high, with 2–4 pinnatisect l. on short petioles at the top; leaflets lanceolate, acuminate, toothed; raceme corymbose; fl. ¾ in. in diam., pure white. Central Europe.

Dermatobotrys Saundersii. (*K. B.* 1893, 367; *B. M.* t. 7369.) Scrophulariaceæ. G. A deciduous per., with somewhat herbaceous stems 1 ft. high and fleshy oblong ovate l. Fl. produced in whorls below the new l., tubular, 1½ in. long, bright red and yellow. Zululand.

Desmodium penduliflorum. (*G. C.* 1883, xx. 748, 749, f. 130.) Leguminosæ. H. shr. with slender pendulous branches, and pinnately trifoliate l., covered with white hairs on the under side. Fl. purple in long racemes. [*Lespedeza Sieboldi*, Miq.] Japan.

—— Var. **flore albo.** (*W. G.* 1893, 69.) H. A white-flowered form.

Deutzia discolor purpurascens. (*R. H.* 1894, 244; *Jard.* 1894, 147, f. 64.) Saxifragaceæ. H. A form with rose-purple fl. Yunnan, China.

Deutzia gracilis, foliis aureis. (*R. H. B.* 1889, 270.) H. L. yellow.

Deutzia Lemoinei. (*Jard.* 1894, 85.) H. A hybrid between *D. gracilis* and *D. parviflora*.

Deutzia parviflora. (*G. C.* 1893, xi. 152, f. 31.) H. China.

Deyeuxia elegans variegata. (*Bull Cat.* 1884, 12.) Gramineæ. G. Rootstock thick. L. numerous, linear, 1–1½ ft. long, deep green bordered with yellow. Bolivia.

Dianella tasmanica variegata. (*Bull Cat.* 1894, 3.) Liliaceæ. G. L. ensiform, 1 ft. or more long, green, striped with yellow. Fl. blue, in a loose branched panicle. Tasmania.

Dianthera bullata. (*Ill. H.* 1886, t. 589.) Acanthaceæ. S. Of dwarf habit, with opposite elliptic acute strongly bullate dark green l., purplish beneath; and slender racemes of small white fl. fascicled in the axils of minute opposite bracts. Corolla 2 in. long, puberulous, bilabiate; front lobe 3-parted. Stamens 2, exserted; staminodes 2. Borneo.

Dianthus brivatensis. (*Jard.* 1892, 174.) Caryophyllaceæ. H. per. A garden hybrid between *D. superbus* and *D. barbatus*.

Dianthus callizonus. (*B. M.* t. 7223.) H. per. The plant is tufted, with pointed glaucous l. The fl. are large, 2 in. in diam., deep rosy-purple with a darker zone around the throat. Transylvania.

Dianthus Freynii. (*G. C.* 1892, xi. 692.) H. per. A dwarf alpine species with linear glaucous l. and purple fl. ¾ in. in diam. Bosnia.

Dianthus Hœltzeri. (*Gfl.* t. 1032.) H. Of tufted habit. L. linear-lanceolate, acute, about 1 in. long, 2 lines broad. Stems 6 in. high, sparingly branched. Fl. solitary, 1½ in. in diam., pink, bearded in the yellow throat with purple hairs. Turkestan.

—— Var. **dentatus.** (*Gfl.* t. 1032.) H. Pet. acutely toothed.

—— Var. **ebarbatus.** (*Gfl.* t. 1032.) H. Fl. paler and scarcely bearded in the throat.

—— Var. **fimbriatus.** (*Gfl.* t. 1032.) H. Pet. fringed.

—— Var. **flaccidus.** (*Gfl.* t. 1032.) H. Stem decumbent, flaccid; fl. rosy-purple.

—— Var. **squamatus.** (*Gfl.* t. 1032.) H. Pet. fringed like those of var. *fimbriatus*, but more finely.

Dianthus plumarius scoticus, flore pleno. (*W. G.* 1888, 242.) H. Garden variety.

Diastema Lehmanni. (*Regel, Descr.* 11.) Gesneraceæ. S. per. in the way of *D. picta*, clothed with glandular hairs. L. stalked, ovate, crenate. Fl. solitary, axillary, pedicels shorter than the l.; corolla with a cylindric tube and spreading ovate lobes, white, spotted, and lined with violet. Colombia.

Diastema picta. (*Gfl.* 1888, 240.) S. per. Herb 6–9 in. high, softly hairy, with scaly rhizomes, like those of an *Achimenes*. Stems erect, branching. L. opposite, petiolate, ovate or lanceolate, crenate, with 1–3 pedicellate fl. in their axils. Calyx-lobes oblong-elliptic. Corolla campanulate-tubular ¾ in. long; tube white, dotted with purple; limb spreading, white, with the lower lobe marked with a dark purple spot. Andes of Colombia

Dichæa vaginata. (*Bull Cat.* 1885, 14, f.) Orchidaceæ. S. Stems long and flattened, with small close-set distichous l. Mexico.

Dichopogon strictus. (*B. M.* t. 6746; *Fl. and P.* 1884, 58.) Liliaceæ. G. per. with tuberous roots and long linear radical l., and paniculate purple fl., 1–1½ in. in diam. East Australia and Tasmania.

Dichorisandra acaulis. (*Ill. H.* 1894, t. 19.) Commelinaceæ. S. An almost stemless plant with a rosette of nearly sessile glossy l. of an intense green with a large number of short longitudinal stripes of silvery white. Under surface of l. deeply tinted with violet purple. Fl. deep violet-blue. Brazil.

Dichorisandra angustifolia. (*Ill. H.* 1892, t. 158.) S. L. lanceolate, acute, 4–6 in. long, dark green marked with numerous transverse white streaks between the nerves, purple beneath. Ecuador.

Dichorisandra mosaica gigantea. (*G. C.* 1892, xi. 696.) S. A var. with stems 2 ft. high, and l. 9 in. long by 5 in. broad.

Dichorisandra pubescens tæniensis. (*G. C.* 1888, iii. 557, f. 75; *B. T. O.* 1888, 306; *G. and F.* 1888, 204, as var. *talmiensis*; *R. H.* 1888, 249, f. 57.) S. per. L. lanceolate, acuminate, of a rich green, striped with white. Fl. blue and white in short terminal spike-like panicles. Brazil.

Dicksonia berteroana. (*Fl. and P.* 1880, 116, f.; *Veitch Cat.* 1880, 22, t. 13.) Filices. G. Tree-fern, with a stem several feet high, crowned with a tuft of arched tripinnate fronds of a very coriaceous texture. Juan Fernandez.

Dicksonia Billardieri. (*Gfl.* 1889, 637, f. 90.) G. [*D. antarctica*, Labill.]

Dicksonia Deplanchei. (*Lind. Cat.* 1876, 6.) G. Tree-fern, with ample tripinnate fronds: rhachis rough, grey-brown: pinnules lanceolate, ¾–1 in. broad, segments ligulate oblong, incise-crenate, or lowest subpinnatifid, coriaceous, green, glabrous. New Caledonia.

Dicksonia Lathami. (*G. C.* 1885, xxiv. 584.) G. Supposed to be a garden hybrid between *D. antarctica* and *D. arborescens*.

Dictyogramma japonica variegata. (*Fl. and P.* 1876, 3.) Filices. G. Fronds 1 ft. or more high, with 2–3 pairs of linear-lanceolate pinnæ, 5–6 in. long, deep green, with a series of oblong blotches on each side of the midrib, pale yellowish-green. [*Gymnogramme japonica*, Hook.] Japan.

Dictyosperma fibrosum. (*K. B.* 1894, 358.) Palmæ. S. Stem slender, about 5 ft. high, 2½ in. in diameter. L. pinnate, 5 ft. long, petioles 2 ft. long: leaflets 1½ ft. long, 1 in. wide. Fruit sub-globose ¾ in. in diam. Local name, "Vonitra." Yields *Piassava* fibre. Madagascar.

Didymocarpus lacunosa. (*B. M.* t. 7236.) Gesneraceæ. S. Allied to *D. crinita*, from which it differs in habit, and colour of its fl. L. ovate, cordate. Infl. *Streptocarpus*-like. Fl. tubular, 1½ in. long, nodding, violet. Penang.

Didymocarpus malayana. (*G. C.* 1896, xx. 123, f. 24; *B. M.* t. 7526.) S. L. ovate, acuminate, green with a covering of white silvery hairs. Scapes numerous erect, 4–6 in. high, each bearing 2–4 fl. which are shaped like those of *Streptocarpus Rexii* but are of a primrose-yellow colour. Penang.

Didymosperma nanum. (*B. M.* t. 6836.) Palmæ. S. Small palm, 2–3 ft. high, with a rusty meal on the petioles and spathes. L. pinnate, with 5–7 leaflets, the lateral ones cuneately rhomboidal, irregularly cut and lobed, and finely toothed on the margins: the terminal leaflet somewhat flabellate, more or less lobed. Fl. in a dense spike. Assam.

Dieffenbachia amabilis. (*Bull Cat.* 1876, 7.) Araceæ. S. evergreen. L. large, obovate-acuminate, thick, shining, bright green, mottled with yellowish-green, mostly in the apical half, midrib very thick. Colombia.

Dieffenbachia amœna. (*Bull Cat.* 1880, 3, t. 14.) S. per. L. oblong, acute, deep green. with numerous blotches of white and pale yellow on both sides. South America.

Dieffenbachia Carderi. (*Bull Cat.* 1880, 4, t. 13.) S. per. L. oblong-ovate, variegated. South America.

Dieffenbachia Chelsoni. (*Bull Cat.* 1877, 4.) S. evergreen. L. dark green. marked along the midrib with a broad feathered grey band, the rest blotched with bright yellowish-green. Colombia.

Dieffenbachia delecta. (*Bull Cat.* 1880, 4.) S. per. Stems mottled. L. elliptic-lanceolate, 8–10 in. long, spotted with a whitish variegation. South America.

Dieffenbachia gigantea. (*Williams' Cat.* 1883, 26, t. 20 ; *Fl. and P.* 1883, 75 ; *Ill. H.* 1866 t. 470.) S. shr. with oblong acuminate l., 20–24 in. long by 7 in. broad, dark green, mottled with light green and white, the midrib and petiole grey. Colombia.

Dieffenbachia illustris. (*Bull Cat.* 1876, 7.) S. evergreen. L. large, oblong-ovate, cordate at base, marked all over with irregular blotches of yellowish-green, and with a tendency to become yellow along the veins. Colombia.

Dieffenbachia Imperator. (*Williams' Cat.* 1881, 23, 34.) S. per. L. 15–18 in. long, 5 in. broad, oblong-lanceolate, acuminate, olive-green, irregularly blotched with pale yellow and white. Colombia.

Dieffenbachia insignis. (*Bull Cat.* 1881, 17.) S. Shrubby per. with green stem and pale green petioles. L. obliquely ovate, shortly acuminate, dark green, with irregular angular pale yellowish-green blotches. Colombia.

Dieffenbachia Jenmani. (*Fl. and P.* 1884, 58.) S. L. oblong pea-green, handsomely marked with elongate whitish blotches along the primary veins, which extend from the midrib nearly to the margin. British Guiana.

Dieffenbachia Lanceola. (*Bull Cat.* 1876, 7.) S. Small evergreen. L. 5–8 in. long, lanceolate or somewhat falcate-lanceolate, dark green, with a narrow feathery central band of white. Colombia.

Dieffenbachia latimaculata illustris. (*Ill. H.* 1876, t. 234 ; *Lind. Cat.* 1876, 6.) S. per. L. lanceolate-elliptic, acute, dark green with large irregular blotches of pale green. Brazil.

Dieffenbachia maculosa. (*Bull Cat.* 1876, 7.) S. evergreen of moderate stature. L. oblong, acuminate, rounded at base, deep green, blotched on the central part with irregular patches of creamy white. Colombia.

Dieffenbachia magnifica. (*Ill. H.* 1883, t. 482 ; *Lind. Cat.* 1883, 3, f. ; *Fl. and P.* 1883, 92.) S. per. L. large, elliptic-oblong acute green with irregular spots of white, some of which have green lines upon them. Venezuela.

Dieffenbachia majestica. (*Bull Cat.* 1882, 15.) S. L. large, oblong-ovate, acuminate, of a rich dark green, with bright yellow blotches, and a central feathery white bar.

Dieffenbachia marmorata. (*Williams' Cat.* 1877, 21.) S. L. ovate-oblong, acute, 12-18 in. long, 6 in. broad, light green, spotted with creamy white Colombia.

Dieffenbachia Meleagris. (*Ill. H.* 1892, t. 159.) S. A slender species, with mottled petioles, and lanceolate acuminate dark green l., marked with a few white spots. Ecuador.

Dieffenbachia nitida. (*Bull Cat.* 1881, 17.) Remarkable for its l., which are oblong-lanceolate, acuminate, with a rounded base, deep glossy green, blotched with bright yellowish-green. Colombia.

Dieffenbachia Olbia. (*Ill. H.* 1892, t. 148.) S. L. large, oblong-lanceolate, dark green, feathered with white along the midrib, and spotted with yellow-green and white. Peru.

Dieffenbachia Parlatorei marmorea. (*Ill. H.* 1877, t. 291.) A var. with the l. beautifully blotched with large irregular greenish-white markings. Antioquia, Colombia.

Dieffenbachia picturata. (*Ill. H.* 1892, t. 162.) S. L. ovate-oblong, acute, dark green spotted with white. Venezuela.

Dieffenbachia princeps. (*Bull Cat.* 1882, 15.) S. L. obliquely cordate, of a dark green, with a few scattered yellow spots, and a silvery-grey central band.

Dieffenbachia Regina. (*Bull Cat.* 1883, 13, t. 9.) S. per. with large elliptic-oblong l., greenish white. mottled with pale green, and margined and blotched with dark green. South America.

Dieffenbachia Rex. (*Bull Cat.* 1883, 13, t. 4.) S. per. with large elliptic-oblong l., of a deep green, beautifully blotched with white; the blotches sometimes marked with green. South America.

Dieffenbachia Shuttleworthii. (*Bull Cat.* 1878, 6, t. 1; *G. C.* 1878, x. 45, f. 5; *Fl. and P.* 1878, 66.) S. per. L. 1 ft. or more long, about 4 in. broad, lanceolate. acuminate, bright green with a broad feathery white band along the midrib. [*D. picta*, Schott.] Colombia.

Dieffenbachia splendens. (*Bull Cat.* 1880, 4, t. 2.) S. per. Stem mottled with dark and light green. L. rich velvety green, with a lustrous surface, freely marked with whitish striated blotches; the midrib is thick and ivory white. Colombia.

Dieffenbachia triumphans. (*Bull Cat.* 1881, 17.) S. shr. L. ovate-lanceolate, acuminate, 12–14 in. long, 4–5 in. broad, dark green thickly blotched with yellowish-green. Colombia.

Dieffenbachia velutina. (*Bull Cat.* 1877, 4.) S. evergreen with dark green stem, white sheathing petioles, and elliptic oblong l. of a bright green. Colombia.

Dieffenbachia vittata. (*Bull Cat.* 1876, 7.) S. evergreen. L. lanceolate, somewhat oblique, drooping, greyish-green, marked on the space between the yellow-green midrib and margin with a feathery band of white. Colombia.

Diervilla præcox. (*Lemoine Cat.* 1894; *Gfl.* t. 1441.) Caprifoliaceæ. H. A hardy shrub resembling *D. amabilis* in habit but flowering three or four weeks earlier. Fl. with carmine tube, rose limb and yellow throat. Japan.

Diervilla sessilifolia. (*G. and F.* 1888, 273; *G. C.* 1897, xxii. 14 f.) H. A handsome shr. with sessile l., and many-flowered cymes of showy yellow fl. Eastern United States.

Dieteria coronopifolia. (*Gfl.* t. 947.) Compositæ. H. per. herb. covered with a viscid pubescence. L. pinnatifid; the segments linear-oblong, toothed. Heads large, radiate, yellow. [*Aster tanacetifolius*, H. B. and K.] North America.

Digitalis campanulata. (*G.* 1896, 163.) Scrophulariaceæ. H. A fine garden race of the common foxglove, *D. purpurea*. Europe.

Digitalis ciliata. (*G. C.* 1892. xii. 614.) H. Nearly allied to *D. grandiflora*, but differing in its campanulate fl. and hairy calyx. Caucasus.

Diglossophyllum serrulatum. (*B. T. O.* 1889, 337.) Palmæ. S. This is the Palm known as *Chamærops* and *Serenæa serrulata*. Texas; Florida.

Dimorphanthus mandshuricus, foliis variegatis. (*Ill. H.* 1886, t. 609.) Araliaceæ. H. shr. or tree. The large bipinnate l. having 4–5 pairs of pinnæ each with 4–6 pairs of elliptic ovate leaflets and one terminal one, all dark green, broadly margined with cream-white. [*Aralia spinosa*, Linn. var.] Mandshuria.

Dimorphotheca fruticosa. (*G. C.* 1887, ii. 398.) Compositæ. G. per. or annual (?) with procumbent stems, obovate l., and pedunculate heads 1½ in. in diam., with white rays, brownish beneath, and a yellow disk. South Africa.

Dioscorea caucasica. (*G. C.* 1894, xv. 778.) Dioscoreaceæ. H. A graceful climber with the lower l. in whorls of three to five, the upper being nearly opposite. It is in general aspect like *Tamus communis*. Caucasus.

Dioscorea crinita. (*B. M.* t. 6804.) G. or S. A climber, much in the way of *D. retusa*. L. digitate; leaflets 5, oblanceolate, mucronate; fl. and bracts white, in graceful pendulous spikes; bracts ovate, with subulate recurved tips. Natal.

Dioscorea Fargesii. (*R. H.* 1896, 540.) H. Species with edible tubers. The general botanical characters approach those of *D. pentaphylla*. Western China

Dioscorea hybrida. (*R. H.* 1882, 379, f. 80–83.) H. H. twiner, with a large flat tuber, subcordate attenuate l., and numerous axillary clusters of greenish-yellow fl. Supposed to be a hybrid between *D. Batatas* and *Tamus communis*.

Dioscorea retusa. (*Veitch Cat.* 1879, 33; *G. C.* 1881, xv. 54, f. 18.) G. twiner. Stems slender. L. oval, distinctly veined. Fl. creamy white, in pendulous racemes. South Africa.

Dioscorea speciosa. (*Bull Cat.* 1882, 15.) S. climber, with slender stems and cordate-sagittate dark green 7-ribbed l., marked between the ribs with silvery-grey bands; under surface purplish.

Diosma Wendlandi. (*R. H.* 1892, 155.) Rutaceæ. G. A dwarf shr. with slender branches, closely beset with small narrow l., and ending in heads of numerous white fl. South Africa.

Diospyros aurantia. (*R. H.* 1887, 349, t.) Ebenaceæ. G. Garden var. of *D. Kaki*, Linn. f.

Diospyros Bertii. (*R. H.* 1887, 349, t.) G. Garden var. of *D. Kaki*.

Diospyros coronaria. (*R. H.* 1885, 293.) H. A small tree with large coriaceous l. Calyx spreading or slightly reflexed in fruit. Fruit subglobose, 1 in. in diam., orange-red. Japan.

Diospyros elliptica. (*R. H.* 1887, 349, t.) G. Garden var. of *D. Kaki*.

Diospyros Sahuti gallica. (*R. H.* 1887, 349, t.) G. Garden var. of *D. Kaki*.

Diospyros Wiseneri. (*R. H.* 1887, 83; 1888, 60, f.) H. shr. with elongate ovate l., shortly attenuated and rounded at the apex; calyx-divisions with a short central lobe. Fruit egg-shaped, obscurely ribbed. [Probably a var. of *D. Kaki*.] Japan.

Dipcadi Balfourii. (*G. C.* 1880, xiv. 424.) Liliaceæ. S. bulb. L. 3 or 4 to a bulb, contemporary with the fl., ensiform, 1 ft. long, bright green. Scape terete, 2–3 ft. long. Raceme 6–9 in. long, laxly 10–12-flowered. Fl. nearly 1 in. long, greenish-yellow. Socotra.

Dipladenia atropurpurea. (*G. and F.* 1890, 469; *Gfl.* 1894, 548, f.; *Ill. H.* 1895, t. 33.) Apocynaceæ. S. Introduced 50 years ago, but lost. Recently reintroduced. It has small ovate l., and fl. as large as those of *D. boliviensis*, but coloured deep velvety maroon. Brazil.

—— Var. **Clarkei.** (*G. C.* 1892, xi. 763.) S. This is typical *D. atropurpurea*, as represented in *Botanical Register*, 1843, t. 27.

Dipladenia carissima. (*Fl. and P.* t. 502.) S. Fl. 5 in. in diam., of a delicate pinkish white, with 5 radiating rose-pink bands at the throat. [*D. martiana*, A. DC.]

Dipladenia delecta. (*Bull Cat.* 1881, 18.) S. Fl. rosy-pink encircled at the mouth with deep rose shaded with violet, the throat being shaded with yellow.

Dipladenia Diadema. (*Bull Cat.* 1881, 18.) S. Fl. pink suffused with rose and encircled with deep rose at the mouth of the light-coloured tube.

Dipladenia eximia. (*G. C.* 1893, xiv. 120.) S. A species with elliptical or orbicular l. nearly 2 in. long, and cymose racemes of rich rose red fl., each 2½ in. across. Brazil.

Dipladenia hybrida. (*Veitch Cat.* 1877, 67.) S. [*D. martiana*, A. DC.]

Dipladenia illustris glabra. (*B. M.* t. 7156; *Gfl.* 1891, 333.) S. Root-stock woody. Stems annual, bearing leathery ovate l. and large rosy-red fl. Brazil.

Dipladenia ornata. (*Bull Cat.* 1877, 4.) S. A fine var. with large fl. of a rich crimson, suffused with violet.

Dipladenia profusa. (*Williams' Cat.* 1880, 15.) S. Fl. rich carmine, 5 in. in diam.

Dipladenia Regina. (*Bull Cat.* 1877, 4.) S. An early flowering var. with rose fl., which become paler with age. [*D. martiana*, A. DC.]

Dipladenia rosacea. (*Bull Cat.* 1879, 5.) S. Fl. pink, suffused here and there, and bordered with a deeper and richer shade of rose; throat yellow with a bright rose ring at the mouth.

Dipladenia Sanderi. (*G. C.* 1896, xx. 652.) S. Allied to *D. eximia*. L. thick, oblong, acuminate, 2 in. long; petiole ½ in. long; fl. 3 in. long and wide, rose-coloured. Brazil.

Dipladenia splendens profusa. *Ill. H.* 1883, t. 491.) S. A var. with oblong shortly acuminate l., and racemes of carmine-rose fl. [Syn. *D. profusa.*] Brazil.

Diplarrhena Moræa. (*Bull Cat.* 1889, 8; *G. and F.* 1889, 391.) Iridaceæ. G. Allied to *Libertia*, with terminal spikes of white and blue fl. Australia.

Diplazium Arnotii. (*Bull Cat.* 1877, 5.) Filices. S. tree-fern. Fronds broad, triangular; the pinnæ and pinnules oblong, acuminate; pinnules cut into close-set lobes. [*Asplenium Arnottii*, Baker.] Sandwich Islands.

Dipodium paludosum. (*G. C.* 1888, iv. 91; *W. O. A.* t. 422.) Orchidaceæ. S. L. distichous, oblong, acute, membranous. Scapes long, with a raceme of 10–12 fl. Sep. and pet. lanceolate, acute, creamy-white, spotted with purple. Lip cuneate-oblong, obtuse. velvety down the centre, and with two teeth at the base, white, with the side parts of the front lobe marked with purple lines. Cambodia to Borneo.

Dircæa refulgens anomala. (*R. H.* 1877, 250.) Gesneraceæ. G. herb. A form with some of the fl. monstrous and standing quite erect, the number of their organs increased and the upper lip often entirely wanting.

Disa atropurpurea. (*G. C.* 1886, xxv. 532; *B. M.* t. 6891.) Orchidaceæ. G. L. linear, grass-like. Fl. solitary, rich purple-lake, on slender peduncles 3–4 in. high. Dorsal sep. hooded, with a very short knob-like spur; lateral sep. elliptic-lanceolate, acute. Pet. eared at base, bifid at apex. Lip with a distinct stalk ¼ in. long, and a cordate acuminate blade, with a wavy margin, and 2–3 teeth on each side. South Africa.

Disa Cooperi. (*G. C.* 1892, xii. 268, f. 45; *B. M.* t. 7256.) S. L. lanceolate, 7 in. long. Scapes erect, 1 ft. high, the lower part clothed with leafy bracts, the upper with fragrant long-spurred fl. of a rosy-carmine with yellow lip. South Africa.

Disa grandiflora psittacina. (*G. C.* 1879, xii. 424.) G. Near var. *Barrellii*. The fl. is lighter yellow; the lateral sep. densely covered inside with crimson spots; the spur, keels and tips dark green. The upper sep. has purple stripes. The pet. dark shining green with dark spots near the border; the base white with a large crimson spot. Lip yellow, purple at apex. South Africa.

Disa incarnata. (*G. C.* 1892, xi. 343, 618, f. 88; *B. M.* t. 7243.) G. L. lanceolate, spotted with red at the base: scape 1 ft. high, bearing numerous orange-red fl., nearly 1 in. across. Madagascar.

Disa kewensis. (*G. C.* 1893, xiii. 625; *G. and F.* 1893, 244.) G. A garden hybrid between *D. grandiflora* and *D. tripetaloides*.

Disa lacera. (*G. C.* 1888, iv. 664, 707.) G. L. linear-filiform. Fl.-stem 10–12 in. high, leafless, with a few sheaths, and several blue fl. in a lax raceme. Upper sep. helmet-shaped, with a short spur: side sep. obliquely oblong, somewhat boat-shaped. Pet. with a broad basal lobe and a narrow very abruptly hooked apical part. Lip oblong, lacerate, or fringed at the apex only, or nearly or quite entire. South Africa.

—— Var. **multifida.** (*G. C.* 1888, iv. 664, f. 93.) G. Differs only in having the lip more or less deeply fringed from base to apex. South Africa.

Disa langleyensis. (*G. C.* 1894, xvi. 35, f. 5.) G. A garden hybrid between *D. tripetaloides* and *D. racemosa*.

Disa macrantha. (*Ill. H.* 1880, 74.) G. The large fl. are rose-coloured, spotted with yellow, the lip darker, and the spur of the dorsal sep. very large. South Africa.

Disa megaceras. (*B. M.* t. 6529.) G. Robust leafy stem 1–2 ft. high, ending in a lax spike 6–12 in. long, of large whitish fl., spotted inside with purple; upper sep. 3 in. long, rather gradually narrowed into its long slender spur. South Africa.

Disa nervosa. (*G. C.* 1894, xvi. 308, f. 41.) G. Species with strap-shaped l. and erect tall scapes. 2 ft. high bearing racemes of bright rose-coloured fl. with spreading segments and a straight spur 1 in. long. Natal.

Disa polygonoides. (*B. M.* t. 6532.) G. Stem 1–2 ft. high, leafy. L. linear-lanceolate, 4–10 in. long. Fl.-spike very dense, 3–19 in. long. Fl. bright brick-red. South Africa.

Disa pulchra. (*G. C.* 1896, xx. 778.) G. Described in 1847. but never before flowered in cultivation. Tubers large: stems 2 ft. high, leafy; raceme erect, 6 in. long; fl. 2 in. across, coloured pale lilac and purple; spur, including base of perianth-tube, 2 in. long. South Africa.

Disa racemosa. (*G. C.* 1887, ii. 809; *B. M.* t. 7021.) G. L. light green, narrow lanceolate. Raceme lax, one-sided, bearing pretty rose-purple fl. about 1½ in. in diam. The upper sep. is hooded with a short spur: the side sep. are elliptic-oblong, apiculate: pet. small, oblong, with an inflexed point: lip small, lanceolate. South Africa.

Disa sagittalis. (*B. M.* t. 7403.) G. A species with short strap-shaped green l. and an erect scape 8 in high, bearing a raceme of about 12 white and blue fl. ⅔ in. long. South Africa.

Disa tripetaloides. (*G. C.* 1889, v. 360; *B. M.* t. 7206.) G. A species like *D. racemosa*, with spikes of 10–30 fl., each about 1 in. across, white and pink, spotted with crimson. South Africa.

Disa Veitchii. (*G. and F.* 1891, iv. 305; *G. C.* 1891, ix. 741; 1894, xvi. 93, f.) G. A hybrid between *D. grandiflora* and *D. racemosa*.

Dischidia hirsuta. (*G. C.* 1896, xx. 182.) Asclepiadaceæ. S. A slender climber with orbicular fleshy l. 1 in. in diam. and axillary clusters of small red tubular fl. India to Java.

Disporum leschenaultianum. (*B. M.* t. 6935.) Liliaceæ. S. per. herb, with a creeping rootstock, erect dichotomously branched stem, shortly stalked elliptic acute 5-nerved l., and axillary clusters of 2–5 pedicellate campanulate white fl., followed by globose black berries. South India and Ceylon.

Dissotis incana. (*G. C.* 1891. ix. 204, f. 46.) Melastomaceæ. G. This plant was in cultivation 50 years ago, when it was figured in *B. M.* t. 3790. It has been reintroduced from Natal, where it is known as *Osbeckia umlauxiana*.

Dizygotheca leptophylla. (*K. B.* 1893, 156.) Araliaceæ. S. This is the correct name of the plant which has been in cultivation for over 30 years under the name of *Aralia leptophylla*. Polynesia?

Dodecatheon Clevelandi. (*W. G.* 1890, 401.) Primulaceæ. H. per. Allied to *D. Media*, growing 12–16 in. high, having violet blue fl., with a yellow and black centre. California.

Dodecatheon Lemoinei. (*W. G.* 1889, 199.) H. A form of *D. Meadia* between *D. integrifolium* and *D. jeffrayanum*.

Dodecatheon splendidum. (*W. G.* 1888, 205–6, f. 44.) H. A garden form of *D. Meadia*. Linn.

Dolichandra cynanchoides. (*B. T. O.* 1891, 112, t. 4; *W. G.* 1891, 282.) Bignoniaceæ. G. Climber with opposite l., each l. with two oblong leaflets and often ending in a tendril. Peduncles axillary, with 1–3 long-tubed red fl. Argentina.

Dolichos simplicifolius. (*B. M.* t. 7318.) Leguminoseæ. G. Tuberous rhizome or caudex, woody. Stems annual, herbaceous, erect, about 1 ft. long, bearing simple lanceolate l. 6 in. long, and axillary clusters of pink pea-shaped fl. Tropical Africa.

Doodia aspera multifida. (*Bull Cal.* 1880, 4.) Filices. G. Crested fern, of dwarf habit; the fronds are arched and pinkish when young.

Doodia harryana. (*G. C.* 1884, xxi. 408.) G. Apparently only a form of *D. caudata*, differing in being stouter, of firmer texture, and larger growth.

Doronicum plantagineum excelsum. (*G. C.* 1883, xx. 239, 297, f. 43.) Compositæ. H. herb. per. 4–5 ft. high, with larger more coarsely-toothed l., and large bright yellow fl.-heads, 3–4 in. in diam.

Dorstenia Walleri. (*G. C.* 1893, xiv. 178.) Urticaceæ. S. Near *D. Mannii*. Rootstock tuberous. Stems per., 1 ft. high. L. ovate, fleshy 2–5 in. long. Infl. green, star-shaped, nearly 1 in. across with five tails 2 in. long. Nyasaland.

Doryanthes Guilfoylei. (*Gard.* 1893, xliv. 69, f.) Amaryllidaceæ. S. A form of *D. Palmeri*. L. 9 ft. long and

8 in. wide. Fl. spike 16 ft. high, bearing numerous clusters of crimson *Imantophyllis*-like fl. Queensland.

Douglasia lævigata. (*B. M.* t. 6996; *G. C.* 1888, iii. 524–5, f. 71; *G. and F.* 1888, 204.) Primulaceæ. H. alpine per. about 2 in. high, densely tufted. L. ½–¾ in. long, linear-lanceolate, entire, in small rosettes. Scapes slender, with a rosette of bracts at the apex, from which arise 2–5 long pedicelled primrose-like pink fl., ½ in. in diam. Calyx campanulate, with ovate teeth. Oregon.

Dracæna Alexandræ. (*G. C.* 1876, v. 689.) Liliaceæ. S. Garden hybrid between *D. nigrescens* and *D. Regina*.

Dracæna amboynensis. (*Bull Cat.* 1876, 8.) S. shr. L. oblong-lanceolate, acuminate, deep bronzy-green, basal half distinctly margined with bright carmine; petioles tinted with purple. Moluccas.

Dracæna amœna. (*Bull Cat.* 1876, 8.) S. shr. of robust habit. L. oblong, acuminate, arching, rich green, bordered with cream colour, and narrowly margined with bright rose; under surface slightly tinted with purple.

Dracæna ampliata. (*Bull Cat.* 1877, 5.) S. var. with lanceolate l., of rich green, striped, margined, and suffused with creamy-white, rose and crimson.

Dracæna angustifolia. (*Williams' Cat.* 1883, 27.) S. A form with linear-lanceolate arching l. about 15 in. long and 1 in. broad, dark green, marked and margined with crimson and rose.

Dracæna argenteo-striata. (*Bull Cat.* 1888, 8.) S. L. narrow, linear-lanceolate, bright green, striped with creamy-white and grey. South Sea Islands.

Dracæna aurantiaca. (*G. C.* 1876, v. 689.) S. Garden hybrid between *D. concinna* and *D. Regina*.

Dracæna Aurora. (*Ill. H.* 1878, t. 304.) S. A form with narrow lanceolate acuminate l., green above, whitish green beneath: midrib and petiole violet tinted with rose. South Sea Islands.

Dracæna Bartelii. (*R. H.* 1886, 178.) S. shr. A var. having the elliptic l. of a reddish-bronze bordered with red in the adult state, and of a brilliant red flaked with brown in the young state.

Dracæna bellula. (*R. H.* 1879, 100.) G. L. crowded, narrow, 6 in. long, 1 in. broad, reddish-brown.

Dracæna Broomfieldii. (*G. C.* 1896, xx. 666, f. 115.) S. L. 15 in. long, 2 in. wide, green margined and striped with white; stem short, jointed, 1 in. in diam. South Sea Islands.

Dracæna Chantrieri. (*Lind. Cat.* 1880, 15.) S. L. elliptic-oblong, the lower ones purplish margined with carmine; in the upper ones the carmine is more and more extended, and passes into bright rose.

Dracæna coccinea. (*Bull Cat.* 1876, 8.) S. shr. of close compact growth. L. broadly ovate-oblong, dark green, veined and marbled with reddish-crimson; sometimes suffused with purplish-rose.

Dracæna congesta discolor. (*R. H.* 1883, 103.) G. A form with densely-set l., of a dark green above, purplish beneath.

Dracæna Coullingii. (*Gard.* 1892, xli. 430.) S. A hybrid between *D. moorcana* and *D. terminalis alba*.

Dracæna cristula. (*Bull Cat.* 1879, 5.) S. A dwarf species allied to *D. erata*. Stems erect, made up of a succession of arrested growths, never attaining any great height. L. pale green, with about nine almost white prominent nerves.

Dracæna cruenta. (*Bull Cat.* 1877, 5.) S. L. oblong, acuminate, dark bronze-coloured, flaked and striped with rose and deep crimson.

Dracæna cuprea. (*G. C.* 1876, v. 690.) S. Garden hybrid between *D. concinna* and *D. Regina*.

Dracæna cuprea. (*Ill. H.* 1893, t. 167.) S. Probably a form of *C. terminalis* with coppery-brown l. shaded with green; leaf-stalks salmon-rose.

Dracæna decora. (*Bull Cat.* 1876, 8.) S. L. acuminate, dark olive green, striped and banded with crimson, the colour extending down into the edge of the petiole: some l. occasionally bordered with cream-colour and crimson-margined: young growth almost entirely cream-colour, flushed and edged with rose.

NOTE.—Most of the cultivated "Dracænas" are garden forms of *Cordyline terminalis*, Kunth.

Dracæna eburnea. (*Bull Cat.* 1876, 8.) S. L. broadly acuminate, light green. margined with pure white.

Dracæna erecta alba. (*Lind. Cat.* 1880, 15; *Ill. H.* 1880, t. 372.) S. L. ascending, of a deep green, broadly and irregularly margined with white.

—— Var. **purpurea.** (*Lind. Cat.* 1880, 15.) S. L. bronzy-green, pale orange along their margin, midribs, and nerves.

Dracæna excellens. (*Bull Cat.* 1885, 14.) L. broadly oblong, drooping, bronze-coloured, variegated with bright rosy-red. [*Cordyline terminalis.*]

Dracæna floribunda. (*B. M.* t. 6447.) S. per. with a tree-like trunk, branching at base, crowned by a dense tuft of lorate acuminate l. 3–4 ft. long, 3–4 in. broad, green. Panicle 3–4 ft. long, drooping, composed of 15–20 racemes 1 ft. or more long, and 2 in. in diam. Perianth greenish, segments recurving, ½ in. long.

Dracæna fruticosa. (*B. M.* t. 6253.) A new name given to the plant wrongly known as *D. ensifolia* in gardens.

Dracæna gigantea. (*G. C.* 1876. v. 690.) S. Garden hybrid between *D. excelsa* and *D. Regina.*

Dracæna godseffiana. (*G. and F.* 1893, 194; *B. M.* t. 7584.) S. A prettily variegated plant, with the characters of *D. sureulosa*, but the spots on the l. are bright creamy yellow. West Tropical Africa.

Dracæna goldieana. (*Bull Cat.* 1877, 9, t. 8; *B. M.* t. 6630.) S. L. cordate-oblong, acuminate, beautifully marked with alternate dark green and silver-grey irregular transverse bars. Under side of young l. and upper part of stem pale reddish-purple. West Tropical Africa.

Dracæna Hibberdii. (*F. M.* t. 201.) S. Stem rose-coloured. Petioles and margins of sheaths rich carmine. L. when young carmine-rose, in growing older deepening in colour until they become almost entirely of a blackish-metallic hue.

Dracæna ignea. (*G. C.* 1876, v. 690.) S. Garden hybrid between *D. concinna* and *D. Regina.*

Dracæna indivisa doucetiana. (*Ill. H.* 1888, t. 40.) G. [*Cordyline.*]

Dracæna Jamesii. (*G. C.* 1893, xiv. 629.) S. A seedling var. of *Cordyline terminalis.*

Dracæna Laingi. (*Fl. and P.* 1882, 122.) S. A robust form. L. prettily variegated with white, rose, and crimson.

Dracæna latifolia schmidtiana. (*Gfl.* t. 1023.) S. A var. with white-striped l.

Dracæna Leopoldi. (*Lind. Cat.* 1879, 10.) S. A robust form, with large recurving l. of a reddish-brown, bordered and margined with rose.

Dracæna Lindeni. (*Ill. H.* 1880, t. 384.) S. L. lanceolate, acuminate, recurving, deep green down the centre, elsewhere cream-coloured with one or two narrow green stripes near each margin. [*D. fragrans*, Ker-Gawl. var. *Lindeni.*] South Brazil.

Dracæna longifolia alba. (*Lind. Cat.* 1880, 16.) S. L. long, dark green, margined with white.

Dracæna Macarthuri. (*Veitch Cat.* 1877, 23.) G. or S. shr. of very dwarf compact growth. L. under 1 ft. long, 3 in. broad, oblong-lanceolate, acute, spreading, vivid rosy carmine and deep olive-green. Australia.

Dracæna macrophylla. (*Lind. Cat.* 1880, 17.) S. L. large, ovate-lanceolate, of a bright green, margined with white.

Dracæna madagascariensis. (*Bull Cat.* 1884, 12.) S. L. long, narrow, acuminate, arching, green. Madagascar.

Dracæna majestica. (*G. C.* 1876, v. 690.) S. Garden hybrid between *D. concinna* and *D. Regina.*

Dracæna marmorata. (*B. M.* t. 7078.) S. A large-growing plant allied to *D. arborea* and *D. Hookeri*, but with the l. bright green, copiously marbled with grey. Singapore.

Dracæna massangeana. (*B. H.* 1881, 327, t. 16.) S. L. broadly lanceolate, acuminate, dark green with a median whitish stripe. [*D. fragrans*, Ker-Gawl. var. *massangeana.*]

Dracæna Massonii. (*R. H.* 1880, 20; *Lind. Cat.* 1880, 17.) S. Of vigorous growth, with large blood-red l., sometimes variegated with salmon or fiery red.

Dracæna miniata. (*Bull Cat.* 1877. 5.) S. L. gracefully arching, oblong, acuminate, of a rich bronzy-green, margined and flaked with bright rosy-crimson.

Dracæna mirabilis. (*Bull Cat.* 1877, 5.) S. L. gracefully recurved, oblong-lanceolate, bronzy-green, margined and some of them suffused with crimson.

Dracæna Moserii. (*Lind. Cat.* 1880, 17.) S. A vigorous form with ovate-lanceolate dark green l. more or less broadly bordered with white.

Dracæna Nitzschnerii. (*G. C.* 1876. v. 690.) S. Garden hybrid between *D. terminalis* and *D. Regina.*

Dracæna nivalis. (*Bull Cat.* 1877, 5.) S. with elegant drooping l., margined with ivory-white; petioles white-margined.

Dracæna picturata. (*Bull Cat.* 1883, 13.) S. An attractive var. with rich olive-green l. flaked and striped with pink and crimson.

Dracæna placida. (*Bull Cat.* 1883, 13.) S. An elegant form, with long narrow-lanceolate recurved undulated l., variegated with creamy white.

Dracæna Poubellei. (*R. H.* 1888. 530.) S. Garden variety.

Dracæna purpurascens. (*G. C.* 1876. v. 690.) Garden hybrid between *D. ferrea* and *D. Regina.*

Dracæna recurva. (*G. C.* 1876, v. 690.) S. Garden hybrid between *D. nigrescens* and *D. Regina.*

Dracæna recurvata alba. (*Lind. Cat.* 1880, 18.) S. A fine var., with long recurved dark green l. bordered with white.

Dracæna regalis. (*G. C.* 1876, v. 690.) S. Garden hybrid between *D. ferrea* and *D. Regina.*

Dracæna Regis. (*Lind. Cat.* 1880, 18; *Ill. H.* 1879, t. 360.) S. L. large, elliptic-oblong, when young passing from clear green to rose and purple, then becoming bordered with scarlet, and ultimately wholly purplish rose-coloured.

Dracæna Rigoutsi. (*Ill. H.* 1896, 24, t. 50.) G. A variegated seedling form raised from *Cordyline australis.*

Dracæna robinsoniana. (*Bull Cat.* 1877, 5; *Ill. H.* 1879, t. 342.) S. L. lanceolate, acuminate, arched, bright green, striped and marked with dark bronzy-green and brownish-crimson. South Sea Islands.

Dracæna rosacea. (*Bull Cat.* 1876, 8.) S. L. gracefully recurved, oblong, acuminate, dark bronzy-green, broadly margined with bright pink; some of the young ones being almost entirely light creamy pink.

Dracæna roseo-perfecta. (*Bull Cat.* 1877, 5.) S. L. lanceolate, acuminate, of a bronzy-green, broadly-margined and striped with rich crimson. The young foliage is creamy white suffused with purplish-rose.

Dracæna roseo-picta. (*Veitch Cat.* 1877, 23.) S. Robust shrub with sub-erect oblong-lanceolate acute l., 18–20 in. long, 4 in. broad, deep olive green variegated with rose, which deepens with age to bright carmine.

Dracæna rothiana. (*R. H.* 1877. 68; *Ill. H.* 1896, t. 50.) S. Of robust habit. L. 12–20 in. long, 3–4 in broad, lanceolate-attenuate, undulate-contorted, bright clear green, transparently reticulate-tesselliate, especially on the marginal part. Comoro Isles.

Dracæna rubescens. (*Bull Cat.* 1877. 5.) S. L. gracefully recurved, lanceolate, deep olive-green, margined with rich rosy-crimson, some of the younger l. tinged with rosy-violet.

Dracæna sanderiana. (*G. C.* 1892, xi. 731; 1893, xiii. 442, f. 65; *J. of H.* xxvi. 389, f. 71.) S. Stem slender, branched at the base. L. 6 in. long, 1½ in. broad, elegantly curved, green with bands of white. Tropical West Africa.

Dracæna Sanjotti. (*R. H.* 1880. 20.) S. A var. with bronzy-red l. bordered with deep rose.

Dracæna sepiaria. (*Gfl.* 1887, 130.) S. L. upright, small, dark green, in tufts. Fl. pure white, in large panicles.

followed by yellow berries, which remain on the plant for a long time. Fiji.

Dracæna Seyforthii. (*G. C.* 1876. v. 690.) S. Garden hybrid between *D. Cooperi* and *D. Regina*.

Dracæna speciosa. (*Veitch Cat.* 1877, 23.) S. L. spreading, oblong-lanceolate, acute. light olive-green, broadly striped or margined with pale yellow, stained and edged with pink.

Dracæna Thompsoni. (*G. C.* 1876, v. 690.) S. Garden hybrid between *Cordyline terminalis* and *D. Regina*.

Dracæna thomsoniana. (*Fl. and P.* 1882. 122.) S. Of bold habit, with a head of long bright green l. West Tropical Africa.

Dracæna triumphans. (*Bull Cat.* 1877, 5.) S. L. narrow lanceolate, of a black purple, the edges of the young l. deeply edged with rose; petioles glaucous on the under surface.

Dracæna venosa. (*Bull Cat.* 1883, 13.) S. A form of dwarf habit, with oblong-ovate acuminate many-ribbed l., yellow-green, blotched and reticulated with dark green. Borneo.

Dracæna vestalis. (*Bull Cat.* 1877, 5.) S. L. long lanceolate, acuminate, rich green, margined with white.

Dracæna virginalis. (*Bull Cat.* 1876, 8.) S. L. long, narrow. acuminate light green. distinctly margined with pure white.

Dracæna vivicans. (*Bull Cat.* 1877, 5.) S. L. long and narrow. dark bronzy-purple, edged and occasionally suffused with bright rose.

Dracæna Warocquei. (*Ill. H.* 1875, t. 217: *Lind. Cat.* 1876, 6.) S. shr. of robust habit. L. ovate, acute, dark green. striped and margined with carmine. Petioles violet-purple.

Dracæna Williamsii. (*Williams' Cat.* 1883. 27. t. 19.) S. L. large, oblong-lanceolate, acute, spreading, recurved, dull green, irregularly striped with chocolate, white, rose, cinnamon, and yellow. Polynesia.

Dracocephalum imberbe. (*Gfl.* t. 1080, ff. 4, 5.) Labiatæ. H. A dwarf species. with cordate crenate-dentate l., and whorls of large blue fl. Siberia.

Dracocephalum Ruprechti. (*Gfl.* t. 1018.) H. per. herb, 5–18 in. high. very showy. L. linear-lanceolate, some entire, others pinnatifid. Fl. large. blue. disposed in few or many-flowered rather distant whorls along the ends of the stems. Turkestan.

Dracocephalum ruyschianum japonicum. (*G. C.* 1879. xii. 166, f. 29.) H. Herb with square stems. linear revolute l., and large terminal heads of large white fl. spotted with blue. Japan.

Dracocephalum speciosum. (*B. M.* t. 6281.) H. per. clothed with spreading pubescence. Stem erect. simple, square. L. cordate, obtuse. crenate, rugose, dark green. radical on long petioles, the cauline with short petioles or subsessile. The upper whorls of fl. crowded into a dense oblong head, 1–4 in. long. Corolla purple. spotted with white and darker purple. Himalaya.

Dracontium albostipes. (*Bull Cat.* 1877, 5.) Araceæ. S. tuber. L. solitary: petiole tall, stout. scabrous at base, greyish white. with irregular bands of dark brown; blade tripartite, the divisions winged, bearing irregularly dichotomous leaflets. bright green. Antioquia. Colombia.

Dracontium annulatum. (*Bull Cat.* 1877, 6.) S. tuber. L. solitary: petiole stout, dull umber-brown. mottled in irregular rings with pale brown and whitish-brown; blade 3-branched, each division branched on one side. Antioquia, Colombia.

Dracontium Carderi. (*Bull Cat.* 1877, 6: *B. M.* t. 6523.) S. tuber. L. solitary: petiole tall, slightly rough at base, dull flesh colour, banded with irregular blotchy rings of umber-brown; blade tripartite, the divisions often twice dichotomous: segments oblong; rhachis irregularly winged. Antioquia. Colombia.

Dracontium fœcundum. (*B. M.* t. 6808.) S. Tuber large, covered with ovoid buds, bearing a single tall ternate l., succeeded by a large purple-brown spathe, on a peduncle 2–3 ft. high. British Guiana.

Dracontium sculpturatum. (*Bull Cat.* 1879. 5.) S. per. with tuberous rootstock. L. solitary. erect: petiole dark brown with pale markings. and

here and there white patches feathering upwards; blade three-parted, the divisions being dichotomously pinnatifid, **with winged rhachis, pale green. Antioquia, Colombia.**

Draperia systyla. (*M. D. G.* 1896, 20.) Hydrophyllaceæ. H. H. A dwarf shr. with long-stalked ovate hairy l. and cymes of bright violet-coloured fl. California.

Drimiopsis perfoliata. (*G. C.* 1878, x. 364.) Liliaceæ. S. bulb. L. stem-clasping, very spreading, roundish, light glaucous green, blotched with bright green. Scape 6 in. long, terete, glaucous green, unspotted. Fl. greenish-white in a dense raceme, the upper ones minute and abortive. Zanzibar.

Drosera cistiflora. (*G. C.* 1889, v. 523: *B. M.* t. 7100.) Droseraceæ. G. A large-flowered species with the habit and l. of *D. capensis* and cup-shaped fl., 2 in. across, coloured scarlet. South Africa.

Drosera dichotoma rubra. (*Bull Cat.* 1880, 4.) G. per., differing from the type in its red colour and more repeatedly forked l., with narrower shorter segments.

Dryas lanata. (*G. C.* 1891, ix. 340.) Rosaceæ. H. A form of *D. octopetala*, Linn. with woolly l. Tyrol.

Drymonia marmorata. (*B. M.* t. 6763: *Fl. and P.* 1884, 124.) Gesneraceæ. S. plant of stout habit, with large elliptic thick l., mottled with grey above, purple beneath. Fl. fascicled in the axils of the l., the stout pedicels, and the large leafy ovate sep. rose-purple; 1½ in. long, with 5 spreading serrulate unequal lobes, light yellow, faintly tinged with red outside. Tropical America.

Drymophlœus appendiculata. (*B. M.* t. 7202.) Palmæ. S. A dwarf palm with large cuneate l.-segments and lateral fl.-scapes. [Named *D. oliræformis*, in *G. and F.* 1891, 330, f. 57; *W. G.* 1891, 392.]

Duvalia angustiloba. (*G. C.* 1883, xx. 230.) Asclepiadaceæ. G. succulent, with sub-globose or oblong tuberculate-toothed stems, and numerous small dark purple-brown star-like fl., with a small white crown-like corona: corolla lobes folded into very narrow vertical plaits. South Africa.

Duvalia polita. (*G. C.* 1876, vi. 130; *B. M.* t. 6245.) G. succulent per., with leafless procumbent 6-angled stems, the angles with longish subulate spreading teeth. Fl. 3-4 together, on 1 in. long pedicels: corolla 1 in. in diam., rich purplish-chocolate, smooth and shining, the lobes slightly folded lengthways and fringed on the basal half with long clavate vibratile purple hairs. [Known as *Stapelia polita*, *echinata*, and *reclinata*.] South Africa.

Dyckia desmetiana. (*B. M.* t. 7340.) Bromeliaceæ. S. An acaulescent species with ensiform thick recurved l. 2 ft. long, armed with marginal prickles. Peduncle 2 ft. long; panicle 2 ft. long, branched; fl. ½ in. long, red. Brazil.

Dyckia frigida. (*B. M.* t. 6294.) S. A reference to its right genus of *Pourretia frigida*.

Dyckia leptostachya. (*G. C.* 1884. xxii. 198.) S. Very similar to *D. rariflora*, but larger. L. 15–18 in a dense rosette, lanceolate, acuminate, recurved, 18–21 in. long, 1–1¼ in. broad at the base, pale green above, mealy white beneath: marginal prickles hooked, brown. Fl.-stem 3–3½ ft. long. Fl. bright scarlet, ¾ in. long, in a lax spike. Paraguay.

Ebermaiera nitida. (*G. C.* 1879. xi. 812.) Acanthaceæ. S. Very dwarf, with convex shining pale green l. marked with intense green along the nerves, and erect spikes of small fl. Brazil.

Echeveria Fulini. (*R. H.* 1892, 362.) Crassulaceæ. G. succulent. A seedling var. of *Cotyledon metallica*.

Echeveria metallica decora. (*Ill. H.* 1883, t. 505; *Fl. and P.* 1884, 10.) G. A var. having the l. longitudinally flaked and striped with dull greenish purple, rose, and cream-colour. [*Cotyledon.*]

Echeveria Purpusi. (*Gfl.* 1896. 608. f. 97; *G. C.* 1896, xx. 698, f. 123.) H. [*Cotyledon Purpusii.*]

Echidnopsis dammanniana. (*W. G.* 1892, 351, f. 59; *Gfl.* 1892, 526, f. 107; *Jard.* 1892, 251, f.) Asclepiadaceæ. G. succulent. Very similar to *E. cereiformis*, with brown fl. Abyssinia.

Echinocactus aureus. (*G. C.* 1895, xvii. 800.) Cactaceæ. G. A garden name for an unflowered cactus with short stems and bright yellow spines ½ in. long. [This is probably *E. Grusoni.*]

Echinocactus bolansis. (*Gfl.* 1889, 106, f. 21.) G. Stems simple or branched, cylindric, growing 12–16 in. high; ribs 8–13, spiral, densely covered with interlacing white spines, of which 20–24 are radiating and four are central. Fl. red. Mexico.

Echinocactus cylindraceus. (*Gfl.* t. 902. f. d.; *G. C.* 1877. vii. 240, f. 39.) G. Plant large, oval or cylindrical, often proliferous at the base, with 21–27 obtuse sub-tuberculate ribs and a woolly spineless depressed top; spines reddish, all stout and annulated, recurved or flexuous; exterior spines 12–18, the lowest usually hooked; central ones four, very stout. Fl. 2 in. long, yellowish, with 40–50 roundish fringed sep. and about 25 fringed pet. Stigmas and fruit as in *E. viridescens.* Colorado.

Echinocactus durangensis. (*H. G.* 1890, 231.) G. Stem cylindrical, 3–10 in. high, having about 21 continuous ribs, armed with yellowish spines tipped with brown ¾–1½ in. long. Fl. brownish red, similar to those of *E. Wrightii*, but brighter. Mexico.

Echinocactus glaucus. (*Späth Cat.* 1894 5.) G. A species with handsome large rose-coloured fl. Mountains of Colorado.

Echinocactus Haselbergii. (*B. M.* t. 7009; *G. C.* 1888, iv. 186; *G. and F.* 1888, 371.) G. Stem globose, many-angled, 2–2½ in. in diam., with tufts of short spreading whitish spines, and brilliant orange-red fl. 1 in. in. diameter.

Echinocactus Joadii. (*B. M.* t. 6867.) G. A beautiful plant, with a globose many-ribbed stem, brownish spines, and handsome bright yellow fl. 2 in. in diam. Outer spines 15–18, radiate; inner ones 6–7, longer and stouter, directed outwards. Calyx-tube with tufts of slender spines, mixed with curly hairs. Pet. narrow oblong, acute. Stigmas crimson. Uruguay?

Echinocactus Johnsoni. (*Gfl.* 1883, 58.) G. A globular species, densely covered with tufts of interwoven straight spines. South United States.

Echinocactus Odieri Mebbesii. (*F. G. M.* 1896, 406, f.) G. A form differing from the type in its flesh-coloured flowers.

Echinocactus senilis. (*Gfl.* t. 1230, f. a.) G. Stem stout, cylindric, 16–18-ribbed, having tufts of numerous hair-like spines, curving upwards, and light pink fl. 1½ in. long, and 1 in. in. diam., with a scaly cylindric tube. Chili.

Echinocactus Simpsoni. (*G. C.* 1876, vi. 292.) G. Stem globose, with spirally arranged tubercles, giving it the appearance of a *Mamillaria*; tubercles a little longer than broad, bearing about 20 radiating slender spines, and 6–8 stout brown central ones. Fl. from the top of the tubercles, yellowish-green or verging into purple. Ovary almost naked. Colorado.

Echinocactus texensis. (*Gfl.* t. 1286.) G. Stem depressed-globose, 5–6 in. in diam., with many acute angles, bearing very distant tufts of about 8 stout brown spines, ½–¾ in. long, transversely ridged. Fl. from the axils of the younger spine-tufts 2–2½ in. in diam., of a delicate rosy-pink. Pet. oblanceolate, beautifully fringed. Berry 1 in. in diam., depressed globose, scarlet, bearing a few spines on the top. Texas.

Echinocactus viridescens. (*G. C.* 1877, vii. 172, f. 26.) G. Plant solitary, 4–7 in. thick, 3–5 ft. high, globose when young, with about 13 obtuse tubercled ribs. Spines about 12, radiating, stout, straight or recurved, reddish, annulated. Fl. 1½ in. long, greenish, with numerous roundish imbricated sep.; pet. oblong, obtuse, denticulate. Stigmas 12–15, linear. Berry green, scaly. California.

Echinocereus pectinatus robustus. (*Gfl.* 1890, 513, t. 1331; *H. G.* 1890, 551.) G. succulent, a robust var. growing to 1 ft. in height, with reddish spines and bright rosy fl., with the lower part of the segments white. Mexico.

Echinocereus phœniceus inermis. (*M. K.* 1896, 150, f.) G. A form differing from the type in not having spines. Colorado.

Echinoglossum striatum. (*G. C.* 1879, xii. 390.) Orchidaceæ. S. L. ligulate, very coriaceous, keeled beneath; sheaths very rough. Peduncle

short. thick, dark, thickly covered with small yellow fl., with 2 red stripes on each sep. and pet. [Apparently a *Cleisostoma*.] Sikkim, India.

Echinospermum marginatum macranthum. (*Gfl.* t. 1119.) Boraginaceæ. H. herbaceous per. with linear-oblong acute roughly hairy l., and numerous axillary scorpioid cymes of pretty blue fl. Caucasus, &c.

Echium fastuosum. (*R. H.* 1875, 10.) Boraginaceæ. G. Robust much branched shr. Branches glaucous, marked with transverse brown leaf-scars. L. 5–6 in. long, crowded, narrowly lanceolate-elliptic, attenuate at both ends. Fl. very numerous, dark blue, in short cymes densely crowded into a spike 8–9 in. long. Madeira.

Eichornia azurea. (*B. M.* t. 6487.) Pontederiaceæ. S. A handsome floating aquatic, with long or short petioled rounded-cordate or rhomboid l., 3–8 in. in diam. Fl. in pairs along a hairy rhachis, bright light blue with a yellow spot on the upper inner perianth-segment. Tropical America.

Elæagnus Simoni tricolor. (*F. G.* 1888, 164; *R. H. B.* 1889, 270.) Elæagnaceæ. H. L. dark green at the margin variegated with golden and greenish yellow in the centre.

Elæocarpus grandis. (*Bull Cat.* 1884, 13.) Tiliaceæ. G. evergreen shr., with lanceolate crenulate l., on short red petioles, and fine white fl. with deeply fringed pet. Queensland.

Elæodendron sphærophyllum pubescens. (*G. C.* 1891, ix. 393.) Celastraceæ. G. A branching leafy evergreen shr. cultivated in some parts of Italy as *Guevina Avellana*. South Africa.

Elaphoglossum backhousianum. (*G. C.* 1882, xvii. 672, ff. 103–105.) Filices. G. fern. Caudex stout, creeping, densely covered with narrow brown scales. Fronds erect, oblong-lanceolate, acute; sterile fronds 1½–2 ft. long, dark green, ciliated with brown scales; fertile fronds smaller, not ciliated, and densely covered on the back with brown spore cases. Mexico.

Elliottia racemosa. (*G. and F.* 1894, 206, f. 37.) Ericaceæ. H. A shr. closely related to *Rhododendron* and *Ledum*, with thin alternate membranous l. and terminal racemes or racemose panicles of white fl. Eastern United States.

Emmenanthe penduliflora. (*G. C.* 1892, xi. 339, f. 49.) Hydrophyllaceæ. H. annual. 2 ft. high. L. deeply cut, and covered with sticky hairs. Fl. in loose panicles, bell-shaped, cream-coloured or yellow. California.

Encephalartos Frederici-Guilielmi. (*G. C.* 1879, xi. 11; *Bull Cat.* 1879, 5.) Cycadaceæ. S. Stock subglobose or cylindric, 15–18 in. thick, covered with ash-grey wool, and marked above with the prominent triangular bases of fallen l. L. 28–30 in. long, 6–8 in. broad, oblong-obtuse, arching, conduplicate; petiole and rhachis terete or slightly flattened above, without spines, covered with woolly down at first; leaflets very crowded, about 120 pairs, ascending; the middle ones 3 in. long and ⅛ in. broad, all linear-oblong, abruptly terminating in a translucent spine, glaucous above, with five prominent nerves and the margins thickened. Cones oblong-ovoid, about 9 in. long, covered with a dense pale brown tomentum. [*E. cycadifolius*, var. *Frederici-Guilielmi*, *Gfl.* tt. 1025–6; *E. acantha*, *G. C.* 1878, x. 810.] South Africa.

Encephalartos Hildebrandtii. (*G. C.* 1878, ix. 430; *Gfl.* 1877, 215, f.) S. Resembling *E. villosa*. L. pinnatisect, white, woolly when young, glabrescent with age: segments very numerous and closely packed, the lower ones decreasing in size, the lowermost reduced to palmate or 2–3-parted spines, central ones lanceolate, 10–12 times as long as broad, spine-pointed and spine-toothed except near the apex. Zanzibar.

Encephalartos regalis. (*Bull Cat.* 1879, 8, f.) S. Trunk stout, cylindric, crowned with from 12 to 20 pinnate l., 6–7 ft. long, the leaflets being lanceolate, with occasional spines on the upper margin. [Doubtfully distinct from *E. Hildebrandtii*, A. Br. & Bouché.] Zululand.

Encholirium corallinum splendens. (*Cat. Comp. Cont. d'Hort.* 1885, 5.) Bromeliaceæ. S. A var. having the l. more compact, more obtuse, and broader than in the type. [*Tillandsia corallina*, K. Koch. var.]

Encholirium roseum variegatum. (*R. H.* 1883, 470.) S. A var. having the l. striped with yellowish bands. [*Tillandsia corallina*, K. Koch. var.]

Encholirium Jonghei. (*R. H.* 1878, 140.) S. Stem short and straight. L. flat, deflexed, pendant, green above, brownish beneath. Scape about 16 in. high, brownish, clothed with adpressed scales. Fl. distichous, sessile, yellowish. [*Tillandsia Jonghei*, K. Koch.] Brazil.

Encholirium Saundersii. (*R. H.* 1878, 180 ; *Ill. H.* 1873, t. 132.) S. L. nearly flat, broad, gracefully arched, glaucous-pruinose, spotted beneath with red, most strongly marked at the base. Scape about 16 in. high, branched. Fl. yellow. [*Tillandsia Saundersii*, K. Koch.] Brazil.

Engelmannia pinnatifida. (*B. M.* t. 6577.) Compositæ. H. per. herb, 1–2 ft. high, roughly hairy. L. petiolate, oblong, pinnatifid. Fl. heads 1½ in. in diam., laxly corymbose, yellow. North America.

Enkianthus campanulatus. (*B. M.* t. 7059.) Ericaceæ. H. deciduous shr., with short racemes of dark red bell-shaped fl. [Syn. *Andromeda campanulata*, Miq.] Japan.

Enkianthus himalaicus. (*B. M.* t. 6460.) H. Something in the way of *E. japonicus*, with ovate-lanceolate acuminate l., and umbels of drooping dull orange-red fl. tipped with brighter red. Eastern Himalaya.

Eomecon chionantha. (*B. M.* t. 6871 : *Gard.* 1889, xxxv. 76, t.) Papaveraceæ. H. per., intermediate between *Stylophorum* and *Sanguinaria*. L. all radical. 1–2 ft. high, broadly cordiform, with a deep open sinus, margin broadly sinuate, and apex rounded. Scape 1–2 ft. high, reddish, erect, subpaniculately branched. Fl. 2 in. in diam., white, faintly nerved : stamens numerous, yellow. China.

Epacris onosmæflora alba. (*Bull Cat.* 1883, 13, t. 7.) G. A var. with dense spikes of blush-white double fl.

—— Var. **flore pleno.** (*Fl. and P.* 1876, 83.) Epacridaceæ. G. shr. of rigid erect habit, and a profuse flowerer. L. very closely set, sessile, rigid, ovate, acuminate, pungent, concave. Fl. double, white, nearly ½ in. in diam., one in the axil of every l., thus converting the branches into beautiful spikes of white fl. Australia.

Epacris onosmæflora nivalis. (*Bull Cat.* 1883, 13, t. 7.) G. A var. with pure white double fl.

Ephedra trifurca. (*Gfl.* 1893, 535.) Gnetaceæ. H. An upright bush 2–4 ft. high with *Equisetum*-like branches. Colorado, &c.

Epidendrum amabile. (*G. C.* 1880, xiv. 588 ; *O.* 1887, 304, f.) Orchidaceæ. G. L. and pseudobulbs glaucous. The pseudobulbs are 2-angled, and usually have 2 lanceolate acute l. Fl. panicled : sep. and pet. brown inside : lip nearly cruciform yellow with some mauve-purple spots. Mexico.

Epidendrum arachnoglossum. (*B. H.* 1882, 554, t. ; *Fl. and P.* 1883, 27 ; *G. C.* 1883, xix. 693.) G. A handsome species, with ligulate obtuse l., and short compact spikes of deep rose-coloured fl., on terminal naked stems. lip 3-lobed and deeply fringed all round, except on the emarginate apex. Colombia.

—— Var. **candidum.** (*G. C.* 1886, xxv. 362.) G. Var. with white fl., only the lateral calli of the lip being orange.

Epidendrum atropurpureum Randi. (*L.* ii. t. 49 ; *Cat. Comp. Cont. d'Hort.* 1886, 4 ; *R.* ser. 2, t. 94.) G. A var. of *E. macrochilum*, with greenish-brown sep. and pet., margined with a paler shade, and a large white lip marked with contiguous red veins at the base. Also called *E. randianum*. Brazil.

Epidendrum atrorubens. (*K. B.* 1896, 46.) G. Allied to *E. plicatum*. L. linear-oblong, 8 in. long, panicle loose, fl. 1 in. across, red-purple. Mexico.

Epidendrum auriculigerum. (*G. C.* 1888, iv. 34 ; *H. G.* 1888, 397.) G. Much like *E. Brusavolæ*, with long narrow sep. and pet. The lip is auricled near the base, the front lobe is triangular acuminate, and there are two long swollen keels between the auricles, and three short ones in front.

Epidendrum Barkeriola. (*G. C.* 1884, xxii. 616.) G. L. lanceolate, acute, wavy, reddish beneath and on the margins ; fl. in a one-sided raceme. Sep. and the light rose-coloured pet. nearly equal. Lip pandurate or obovate, white, with a deep purple blotch, and some short purple streaks on the disc, where there are two raised lines. [Syn. *Barkeria Barkeriola*, Reichb. f.]

Epidendrum brachiatum. (*G. C.* 1880, xiii. 648.) G. In the way of *E. Farcoris* and *E. virgatum*. Pseudobulb glaucous, bearing one glaucous ligulate l. The raceme bears numerous stellate waxy pale yellow fl. spotted with cinnamon. Mexico.

Epidendrum capartianum. (*L.* vii. t. 333.) S. [*E. godseffianum*, Rolfe.]

Epidendrum chlorops. (*G. C.* 1881, xiv. 524.) G. Of botanical interest only. Fl. green; lip with three blunt keels. Mexico.

Epidendrum christyanum. (*G. C.* 1884, xxii. 38.) G. Allied to *E. glaucum* with long pyriform 2-leaved pseudobulbs, and erect racemes of greenish and brown fl. Bolivia.

Epidendrum cingillum. (*G. C.* 1882, xvii. 330.) S. Stems thin. L. 3 in. long, 3–4 lines broad. Raceme few-flowered. Fl. ochre, with dark purple spots on the lip. Sep. and pet. linear-lanceolate. Lip cordate at base, narrowing towards the retuse tip, with two semilunar orange calli at the base.

Epidendrum clæsianum. (*G. C.* 1893, xiii. 641.) S.

Epidendrum cooperianum caloglossum. (*G. C.* 1882, xvii. 460.) G. A var. with a rich purple lip.

Epidendrum coxianum. (*G. C.* 1877, viii. 358.) S. Pseudobulbs fusiform. L. ligulate. Fl.-panicle from the young shoot: rhachis viscous: sep. brownish-yellow: throat pale green; lip pale yellow. Fl. resembling that of *E. clavatum*. Tropical America.

Epidendrum dellense. (*G. C.* 1891, ix. 584; *Gfl.* 1891, 360.) G. A hybrid between *E. xanthinum* and *E. radicans*.

Epidendrum elegantulum. (*G. C.* 1896, xix. 361, f. 49.) G. A garden hybrid between *E. Endresio-Wallisii* and *E. Wallisii*.

Epidendrum Ellisii. (*K. B.* 1894, 184.) G. Stems 1½ ft. high; l. 4 in. long; fl. in short racemes, rose-coloured with a yellowish crest on the lip. Colombia.

Epidendrum Endresii. (*G. C.* 1883, xix. 432; 1885, xxiii. 504, f. 91.) G. Stems a span high, with light greenish-yellow sheaths, covered with dark purple warts; l. cordate ovate, emarginate. Fl. white, the tips of the sep. green, the lip with some mauve blotches and orange calli. Costa Rica.

Epidendrum Endresio-Wallisii. (*O. R.* i. 104.) G. A garden hybrid between the two species indicated in the name.

Epidendrum falsiloquum. (*G. C.* 1885, xxiii. 566.) G. This much resembles *E. verrucosum*. L. linear, acuminate, with purple lines on the sheaths: fl. paniculate, whitish-ochre. The lip with 3 linear acute mauve keels, and white basilar calli.

Epidendrum forgeteanum. (*G. C.* 1893, xiii. 752.) G. A species with yellowish flowers, veined with dull rose.

Epidendrum fraudulentum. (*G. C.* 1886, xxv. 648.) S. A small-flowered species with light rosy fl., the column and lower part of the ovary purple, the keel and calli yellow.

Epidendrum godseffianum. (*G. C.* 1892, xi. 136.) S. Of the section *Encyclium*, with stout long pseudobulbs and long branching racemes of brown, white, and rose-purple fl. Brazil.

Epidendrum Hartii. (*K. B.* 1894, 157.) S. Allied to *E. parvum*; stems 8 in. long; l. linear 4 in. long; fl. in branched terminal panicles, small, pale yellow. Trinidad.

Epidendrum ionocentrum (*G. C.* 1883, xx. 8.) G. Much in the way of *E. Brassavolæ*, but larger. Pseudobulb shorter, broad, dark green: raceme 20–24-flowered; sep. and pet. greenish-brown; lip white with a violet centre. Tropical America.

Epidendrum Kienastii. (*G. C.* 1887, ii. 126.) G. L. 2, cuneate-oblong, acute, 6 in. long, ½–1 in. broad. Raceme several-flowered. Fl. rose-coloured, marked with purple veins on the sep. and pet., and with purple raised lines on the white lip. Sep. lanceolate, the dorsal one broader at apex. Pet. cuneate-oblong, acute. Lip with the side-lobes cuneate-oblong, 2-toothed, and the mid lobe cuneate-oblong, acute, wavy: crest 2-shanked, with 5 elevated lines.

Epidendrum laucheanum. (*K. B.* 1893, 63.) G. Allied to *E. grandiflorum*, but with l. and fl. only half the size: stems 8 in. long, leafy; l. narrow, 3–6 in. long: racemes terminal, many-flowered, the whole of a brownish colour, lip green. Colombia.

Epidendrum mantinianum. (*Ill. H.* 1892, t. 150.) G. A dwarf species with glaucous green l., and large solitary fl. Fl. pale whitish-green, marked with purple-brown dots on the veins of the sep. and pet., and with larger markings on the acute lip.

Epidendrum marmoratum. (*G. C.* 1876, v. 688.) G. Thick fusiform pseudobulbs, bearing 1–3 oblong l., 2 in. long, by 1 in. wide. Fl. numerous, dense, pellucid, crystalline white, adorned with deep purple blotches and streaks. Mexico.

Epidendrum Mathewsii. (*G. C.* 1886, xxvi. 458; 1887, ii. 431.) G. One of the *Nanodes* group, with short procumbent stems, and distichous rigid fleshy l. Sep. and pet. small, nearly transparent, stained with purple outside, lateral sep. connate half-way up. Lip orbicular, bifid at apex, convex above, concave beneath, deep shining dull blood-purple, completely concealing the lateral sep. Peru.

Epidendrum mooreanum. (*K. B.* 1891, 199.) G. Allied to *E. stellata*, with linear l. 1 ft. long, and a lax panicle of moderate-sized green and purple fragrant fl. Costa Rica.

Epidendrum Moseni. (*G. C.* 1880, xiv. 390.) G. With brilliant and variously coloured fl. Pet. broad, with a few teeth. Lip shortly toothed. Side lobes oval; middle lobe cuneate, retuse. Colombia?

Epidendrum o'brienianum. (*G. C.* 1888, iii. 770, 771, f. 103; *H. G.* 1888, 371.) G. Garden hybrid.

Epidendrum Ortgiesi. (*Gfl.* 1892, 139.) G. A showy species with 1 to 2 strap-shaped l., and a raceme of rather large fl. Sep. and pet. red with a white border: lip purple. Grown also under the name of *E. amabile*.

Epidendrum palpigerum. (*G. C.* 1879, xii. 40.) G. In the way of *E. Wightii*, but with a trifid denticulate lip, the central lobe ovate acute. Fl. in clusters arranged in a panicle, of a beautiful lilac. Pet. twice as large as sep., and with a few crenations. Mexico.

Epidendrum paytense. (*G. C.* 1885, xxiii. 726.) G. A beautiful species with stiff stems, having purplish-brown sheaths, and short oblong acute l., tinted with the same colour. Fl. brilliant scarlet, with some orange and some darker spots on the lip. Colombia; Peru.

Epidendrum polyanthum asperum. (*G. C.* 1885, xxiii. 818.) G. The ovaries and rhachis densely covered with small warts.

Epidendrum Pristes. (*G. C.* 1886, xxvi. 262.) G. Stems slender. L. very minutely serrulate. Pedicels white at base. Fl. bright cinnabar, with a yellow lip spotted with cinnabar. Sep. and pet. lanceolate, the pet. serrate on the upper half. Lip trifid, serrate, the mid-lobe small and bilobed, with a flexuous keel at the base of the disk.

Epidendrum Pseudepidendrum auratum. (*G. C.* 1885, xxiii. 406.) G. Disk of the lip crimson, and the borders deep orange.

Epidendrum pugioniforme. (*Acta Hort. Petrop.* 1890, xi. 305.) G. Allied to *E. geminiflorum* and *E. leucochilum*. L. 4–6 in. long, narrow lanceolate-oblong. Fl. large, about 2 in a subsessile terminal raceme. Sep. and pet. linear-lanceolate, at first greenish, changing to yellowish. Lip three-parted, cordate at base, at first white, afterwards yellow. Mexico.

Epidendrum pumilum. (*K. B.* 1893, 171.) G. Allied to *E. Endresii*. Stems 5 in. long, with small oblong l. and short few-flowered racemes of greenish yellow fl. Costa Rica.

Epidendrum punctulatum. (*G. C.* 1885, xxiv. 70.) G. Allied to *E. amabile*. Fl. in a slender panicle; sep. and pet. lanceolate, acute, brown, green outside. Lip trifid, light yellow, with minute brown dots. Mexico.

Epidendrum pusillum. (*G. C.* 1891, x. 669.) G. A small species allied to *E. lampense*. Pseudobulbs ovoid-globose. L. 5 in. long. Raceme one-flowered. Fl. yellowish-green freckled with brown. Brazil.

Epidendrum radiatum fuscatum. (*G. C.* 1889, v. 43.) G. Fl. wholly purplish.

Epidendrum stamfordianum leeanum. (*G. C.* 1888, iii. 521; *H. G.* 1888, 281.) G. A var. in which the ochreous sep. and pet., and the pale rose-coloured lip are spotted with purple.

—— Var. **Wallacei.** (*G. C.* 1887, i. 543.) G. Front lobe of the lip obcordate, entire, and very narrow. Colombia.

Epidendrum stangeanum. (*G. C.* 1881, xv. 462.) S. A small species 5–6 in. high, with rigid semiterete channelled blunt l., and a small few-flowered shorter inflorescence of small green fl. Sep. and ovary hairy. Panama.

Epidendrum tampense. (*G. C.* 1888, iv. 150; *H. G.* 1888, 457.) G. A small slender species, with small ovoid pseudobulbs, linear l. 6 in. long, and a slender scape, bearing several fl. of about 1¼ in. in diam. Sep. and pet. cuneate-linear, yellowish-brown. Lip with linear side-lobes, and a rounded obtuse front lobe, white, with purple lines that are more or less confluent. Florida.

Epidendrum trachychilum. (*Gfl.* t. 1205.) G. An unattractive plant with narrow ovoid pseudobulbs, bearing two broad linear acute l. and a lax panicle of moderate-sized fl. Sep. lanceolate, dull olive green. Pet. oblanceolate, acute, dull olive green, with red dots. Lip yellow, dotted with red; side lobes angular in front: mid-lobe elliptic, obtuse, undulate, with small tuberculate keels on its disk. Mexico.

Epidendrum tricolor. (*K. B.* 1893, 63.) G. Allied to *E. purum*; stems 5 in. long; l. 4 in. long; fl. small and numerous, light yellow, with a cucumber-like odour. Venezuela.

Epidendrum tripunctatum. (*G. C.* 1881, xvi. 38.) G. Pseudobulbs ovoid, shining. L. linear, acute. Sep. and pet. lanceolate-triangular, acute, greenish-yellow to yellow. Lip very large, oblong, convex, rugose, whitish yellow. [*E. ghiesbreghtianum*, A. Rich.] Mexico.

Epidendrum Umlaufti. (*W. G.* 1893, 209, t.) G. [*E. costaricense*, Reichb. f.]

Epidendrum vitellinum, flore pleno. (*G. C.* 1890, viii. 123.) G. Remarkable in having perfectly regular fl. formed of 12 segments.

Epidendrum vitellinum giganteum. (*Warner Orchid. Plants* ser. 3, t. 27.) G. [*E. vitellinum*, Lindl., var. *majus*.]

Epidendrum Wallisio-ciliare. (*G. C.* 1894, xvi. 730.) G. A garden hybrid between the two species indicated by the name.

Epidendrum watsonianum. (*G. C.* 1892, xi. 214.) G. A species allied to *E. godseffianum*. Brazil.

Epidendrum wendlandianum. (*G. C.* 1893, xiv. 58.) G. Allied to *E. tripunctatum*: it has creeping fleshy stems, linear l. and fl. 2 in. across, the sep. and pet. light green, and the lip snow-white, with purple lines on the side lobes. Mexico.

Epidendrum xipheroides. (*G. C.* 1896, xx. 63.) G. A species with large pear-shaped pseudobulbs, each bearing two l. which are linear, thick, 8 in. long, ½ in. wide; raceme slender, few-flowered; sep. and pet. green with purple lines: lip yellow, with a thick white callus. Brazil.

Epilælia hardyana. (*G. C.* 1894, xvi. 605, 629, f. 80; *O. R.* 1894, 364.) Orchidaceæ. G. A garden hybrid between *Epidendrum ciliare* and *Lælia anceps*.

Epilobium obcordatum. (*Gfl.* 1885, 277; *J. of H.* xxvii. 179, f.) Onagraceæ. H. A dwarf perennial. Stems decumbent, 3–5 in. high. L. opposite, sessile, ovate, ½ in. long. Fl. ¾ in. in diam., bright rose. Pet. deeply obcordate. Stamens yellow. California.

Epimedium perralderianum. (*B. M.* t. 6509.) Berberidaceæ. H. per. L. trifoliolate: leaflets cordate, acute, acutely dentate. Fl. racemose, yellow with red-pouched pet. (nectaries). Algeria.

Epiphronitis Veitchii. (*G. C.* 1890, vii. 799; *J. of H.* xxi. 513, f. 68; *Gfl.* 1890, 592.) Orchidaceæ. G. An interesting hybrid raised from *Epidendrum radicans* and *Sophronitis grandiflora*.

Epiphyllum Gærtneri. (*B. M.* t. 7201; *G. and F.* 1891, 210.) Cactaceæ. S. Fl. scarlet, 2½–3 in. in diam., with radiating lanceolate acute pet. Previously considered to be only a variety of *E. russellianum*. [Syn. *E. makoyanum*, Hort.]

Epiphyllum Gibsoni. (*B. M.* 1886, 283.) S. succulent, much in the way of *E. truncatum*, producing at the ends of the branches 2 to 4 fl. of a beautiful dark orange-red, having some straight hairs ½ in. long at their base.

Epiphyllum Guedneyi. (*R. H.* 1883, 273.) S. A distinct form, with large creamy-white fl.

Epiphyllum makoyanum. (*Gard.* 1889, xxxv. 375; *J. of H.* 1889, 362, f.: *R. H. B.* 1889, t. 229.) S. Formerly known as E. *russellianum Gærtneri*, but quite distinct from *E. russellianum*, Gard. [*E. Gærtneri*, Hook. f.] Brazil.

Epiphyllum russelianum Gærtneri. (*Gfl.* t. 1173.) S. [*E. Gærtneri*, Hook, f.]

Epipremnum mirabile. (*Bull Cat.* 1882, 15, f. 12.) Araceæ. S. climber. This is the celebrated "Tonga plant," interesting for the manner in which the slender stems, with small entire cordate l., gradually develop thick stems with very large pinnate l. Infl. large, white. Fiji, &c.

Episcia densa. (*K. B.* 1895, 17.) Gesneraceæ. S. Allied to *E. erythropus*. Stem short; l. oblong, purplish: fl. axillary; corolla cylindrical, 1½ in. long, yellow tinged with purple. British Guiana.

Episcia erythropus. (*B. M.* t. 6219.) S. per. of dwarf habit. Stem very short. L. radical, 1 ft. long, broadly lanceolate, attenuate at both ends, bright green above, paler and suffused with red beneath: petiole, nerves, and midrib purple-red. Fl. fascicled in the axils of the l.: peduncles 2 in. long, slender; corolla tubular, with a spreading 5-lobed limb, 1 in. long, ¾ in. in diameter, pale flesh-colour, the inside of tube yellow with purple-orange spots. Colombia.

Episcia Luciani. (*Ill. H.* 1876, t. 236.) S. per. hairy herb. Stem stout, green. L. 4–6 in. long, 2½–3½ in. broad, elliptic-ovate, acute, purple-red below, very dark green above; the stout midrib and petiole and the veins below light green. Fl. in short axillary leafy fascicles, salver-shaped, bright red, pubescent. Colombia.

Episcea maculata. (*B. M.* t. 7131.) S. A trailing fleshy-stemmed plant, with ovate green l., and axillary large-bracted clusters of tubular yellow and brown fl., which are remarkable in having one of the corolla-lobes folded inwards and forming a lid-like valve to the tube. British Guiana.

Eragrostis elegans. (*G. C.* 1880, xiv 566.) Gramineæ. Hardy annual. Brazil.

Eranthemum albo-marginatum. (*Williams' Cat.* 1880, 15.) Acanthaceæ. S. foliage plant with oblong-elliptic l., 4–6 in. long, 2–3 in. broad, suffused with grey, and broadly margined with white. Polynesia.

Eranthemum borneense. (*B. M.* t. 6701.) S. shr. with ovate-oblong acuminate l., and handsome spikes of white fl., with a sulphur area on the lowest corolla lobe. Borneo.

Eranthemum eboracense. (*Bull Cat.* 1881, 18.) S. per. of neat habit, producing axillary white fl. Corolla with a slender tube 1 in. long, and a spreading limb of five oblong obtuse segments, over 1 in. across. Duke of York's Island, New Britain.

Eranthemum Eldorado. (*Williams' Cat.* 1877, 21.) S. shrub with large broad ovate l., of a bright golden yellow, mottled and veined with pale green. South Sea Islands.

Eranthemum laxiflorum. (*B. M.* t. 6336.) S. L. petiolate, opposite, lanceolate, narrowed at each end, subacute. Fl. bright purple, in axillary cymes; corolla 1 in. in diam., 5-lobed, the two upper lobes erect and nearly parallel. Polynesia.

Eranthemum macrophyllum. (*Bull Cat.* 1886, 7.) S. winter-flowering shr., with terminal and axillary spikes of light blue fl. The upper and side lobes of the corolla are reflexed on the sides of the long whitish tube, the lower petal or lip is projecting, and of a deeper blue than the other lobes. [*Dædalacanthus macrophyllus*, T. Anders. *B. M.* t. 6486.] Burma.

Eranthemum nigrescens. (*Bull Cat.* 1878, 155.) S. L. blackish-purple, elliptic lanceolate, acuminate, 8–10 in. long, and about 4 in. broad. South Sea Islands.

Eranthemum nigrum. (*Ill. H.* 1880, t. 404.) S. herbaceous per., with ovate-lanceolate acute crenately-toothed blackish-purple l., 3–4 in. long, 2–2½ in. broad. Solomon Isles.

Eranthemum roseum. (*Ill. H.* 1876, t. 235.) S. per. with erect stem, bearing large cordate ovate acute l., dark green above, purple-red below. Fl. rose-purple: tube 1 in. long, slender and arched: limb small, with four unequal lobes, the three lower rounded, flat and spreading, the upper ovate, acute, concave, projecting outwards. Brazil.

Eranthemum Schomburgkii. (*Ill. H.* 1879, t. 349.) S. per. with ornamental foliage. L. ovate-lanceolate, acute, deep green reticulated with yellow. [*E. reticulatum*, Hook. f.: *B. M.* t. 7480.] South Polynesia.

Eranthemum tricolor. (*Bull Cut.* 1876, 9.) S. L. opposite or ternate, olive green, blotched with greyish-purple and salmon colour. South Sea Islands.

Eranthemum velutinum. (*Bull Cut.* 1886, 8.) S. shr. with deep velvety olive-green bullate l., and long spikes of rosy-pink fl. with a slender curved tube 1 in. long.

Eremurus aurantiacus. (*Gfl.* t. 1168.) Liliaceæ. H. L. linear, pale green. Raceme of light yellow fl. rather lax. Affghanistan.

Eremurus Bungei. (*Gfl.* t. 1168.) H. Resembling *E. aurantiacus* in habit, but with a much longer and denser raceme of bright golden yellow fl. with orange anthers. Persia.

Eremurus bucharicus. (*Gfl.* t. 1315, f. 1.) H. bulb, with triquetrous glaucous l., retrorsely serrulate-scabrous on the margin and keel, and a fl.-stem about 3 ft. high, with a long and rather lax raceme of white fl. about 1 in. in diam., the segments marked with a brownish-red median line. Bokhara.

Eremurus himalaicus. (*G. C.* 1881, xvi. 50, 49, f. 11; *B. M.* t. 7076.) H. herbaceous per., with tufted fleshy roots, strap-shaped acute glabrous l. 1 ft. or more long, and a scape 1½-2 ft. high, bearing a dense conical raceme of white fl. Temperate Himalaya.

Eremurus Olgæ. (*Gfl.* t. 1048.) L. narrow, linear-lanceolate, glabrous, with rough margins, 8–12 in. long. Fl.-stem very tall, with a very long dense raceme of white fl., 1–1¼ in. in diam. Central Asia.

Eremurus turkestanicus. (*Gfl.* t. 997.) H. A robust plant, with broadly linear acuminate l., and a tall scape, with a very long dense raceme of reddish-brown fl., the perianth-segments being margined with white. Stamens much exserted. Turkestan.

Eria acutissima. (*G. C.* 1876, v. 567.) Orchidaceæ. S. in the way of *E. ringens*, with a rather thin slightly fusiform stem, bearing a few linear-lanceolate acute l. at the top, and racemes of small yellow fl. with a brownish-red base. Lip 3-lobed. Pacific Islands?

Eria albiflora. (*K. B.* 1893, 171.) S. Near *E. articulata*. Small in all its parts, with ovoid pseudobulbs and a short scape of small white fl. South India.

Eria bicolor. (*G. C.* 1888, iii. 9: *O.* 1888, 263.) Stems stout, 4–5 in. long, very tumid at the base, bearing 5–7 narrow cuneate-lanceolate acuminate stiff l., as long as the stem, standing nearly erect at the top. Racemes of pure white fl., one-sided, having white bracts and pubescent purple ovaries and rhachis. Sep. triangular acuminate. Pet. narrower. Lip sigmoid, trifid with no keels or ridges. side lobes blunt, mid lobe acute. Ceylon.

Eria biflora. (*O. R.* 1896, 10.) G. Plant 6 in. high with two-flowered racemes of whitish-yellow fl. Sikkim: Burma.

Eria bigibba. (*G. C.* 1885, xxii. 680.) Rhizome slender with close-set long plaited petiolate l. standing on a tumid cylindric foot much shorter than the petiole. Fl. racemose; sep. and pet. light red; lip nearly white, with small purple dashes at the base. Borneo.

Eria cæspitosa. (*K. B.* 1896, 194.) G. A species of tufted habit without pseudobulbs. L. 2 in. long. Fl. very small, white, purple and yellow. Hainan.

Eria cinnabarina. (*K. B.* 1894, 183 *L.* x. t. 448.) S. Allied to *E. bractescens*. Pseudobulbs 1 in. long, l. 6 in. long, racemes 4 in. long, each bearing about six fl., each 1 in. across, with lanceolate bracts; the whole inflorescence coloured rich cinnabar orange. Borneo.

Eria Corneri. (*G. C.* 1878, x. 106.) S. Near *E. Griffithii*. Pseudobulbs 2 in. high, obtusely 4-angled, glaucous. L. petiolate, oblong-acute, thin, nervose. Fl. pale green, the lip white, with a purplish middle lobe and purplish-streaked side lobe. Formosa.

Eria Curtisii. (*G. C.* 1880, xiv. 685.) S. Nearly fusiform wrinkled pseudobulbs, ligulate acute l., and lateral racemes of yellowish-white fl. Borneo.

Eria dayana. (*G. C.* 1877, viii. 102.) S. In the way of *E. sicaria*, with creeping rhizome, small ovoid pseudobulbs bearing 3 leathery linear-lanceolate acuminate l. Racemes loose; rhachis and outside of fl. woolly, white. Fl. honey-yellow. lip with brown blotches and a blackish callus. India.

Eria Elwesii. (*G. C.* 1883, xix. 402; 1885, xxiii. 439.) G. A tiny species with depressed pseudobulbs covered with fibrous sheaths, without prominences. Fl. small, light brown. Sep. connate in a 3-toothed perianth. [*E. Meirax*, N. E. Br., *B. M.* t. 7329.] India.

Eria Fordii. (*G. C.* 1886, xxvi. 584.) S. Closely allied to *E. rosea*, but differing in the larger and differently coloured fl. Pseudobulbs ovoid. sub-compressed, smooth. L. linear-lanceolate, acute, 8–9 in. long, $1\frac{1}{2}$–$1\frac{3}{4}$ in. broad, leathery. Racemes terminal. 2–3-flowered. Ovary acutely 3-keeled. Sep. 1 in. long, lanceolate, acute, acutely keeled down the back, light yellowish green. Pet. ovate-lanceolate, subacute, coloured like the pet. Lip narrow oblong, obtuse, apiculate, with small rounded lateral lobes, and 3 blunt keels on lower half, deep dull yellow with dull crimson veins. Hong Kong.

Eria ignea. (*G. C.* 1881, xv. 782.) S. An interesting species with very small pseudobulbs and narrow l. Peduncle, ovary and lip yellow; sep. and pet. vermilion. Borneo.

Eria laucheana. (*G. C.* 1892, xi. 809.) S. Near *E. dillwyniana*. Raceme drooping, bearing green and purple fl.

Eria leucoxantha. (*G. C.* 1880, xiv. 358.) S. Sep. and pet. very faintly washed with brown. Spur orange-coloured. Lip white, with a few purple spots in front of the column, faintly sulphur-coloured outside. [*Tainia latifolia*, Reichb. f.]

Eria lineoligera. (*G. C.* 1885, xxiv. 262.) S. Pseudobulbs fusiform, with rather thick cuneate oblong-lanceolate l. Raceme with lanceolate acute reflexed orange bracts; fl. white, thin; sep. and pet. lanceolate, acute, curved. Lip cuneate, dilated, trifid, with 3 keels from the base to the disc, and with purple lines on each side. Siam.

Eria marginata. (*G. C.* 1889, v. 200; *B. M.* t. 7238.) S. Plant, 6 in. high, with oblong l. and a hairy raceme bearing two whitish fl.; the lip coloured pale yellow, with a red margin. Burma.

Eria Meirax. (*G. C.* 1880, xiv. 603.) S. A minute epiphyte, with leafless button-like pseudobulbs covered with a few pale brown fibres. The fl. are solitary, nearly sessile, about $\frac{1}{3}$ in. long, and of a dull brownish-purple colour. India.

Eria merguensis. (*G. C.* 1880, xiii. 616.) S. A little-known orchid, with light sulphur-coloured fl., woolly outside. The calli over the sinuses of the lip are deeper yellow. L. two, parchmenty, ligulate, blunt at the apex. India.

Eria monostachya. (*G. C.* 1885, xxiii. 532.) S. Allied to *E. paniculata*. L. 1 in. broad. Inflorescence simple, tomentose with stellate hairs; fl. light greenish-yellow. Java.

Eria muscicola. (*G. C.* 1887, ii. 522.) S. An insignificant species, with minute pseudobulbs, l. about $\frac{1}{3}$ in. long, and racemes of very small yellowish-green fl. Ceylon.

Eria rhodoptera. (*G. C.* 1883, xviii. 586.) S. A curious species, with strong cylindric sulcate stems, two ligulate acute l., and whitish-ochre fl., with the pet. and side lobes of the lip purple.

Eria Rimanni. (*G. C.* 1885, xxiv. 712.) S. Pseudobulbs pyriform, about 3 in. long. L. cuneate-oblong, acute, leathery, light green, with darker nerves. Raceme nodding, dense, covered with a few reddish hairs; fl. pellucid, pale yellow; the front lobe of the lip golden yellow with two purple spots. Burma.

Eria sphærochila. (*G. C.* 1878, x. 106.) S. Rhachis puberulous. Fl. ochre-yellow with some violet-purple margins to the lateral auricles of the

lip: sep. lanceolate, acuminate; pet. much narrower; lip 3-lobed; chin nearly obsolete. [*E. excavata*, Lindl.] Khasia Hills.

Eria striolata. (*Ill. H.* 1888, t. 48; *G. C.* 1888, iii. 554.) S. Allied to *E. stellata*, Lindl., with short pseudobulbs, broad cuneate-oblong acute l., and a stout erect raceme of moderate-sized fl. Sep. and pet. linear, acute, ochreous, striate with purple, the sep. sparsely hispidulous outside. Lip oblong, 3-lobed, 3-keeled. New Guinea.

Eria vestita. (*G. C.* 1892, xii. 138; *B. M.* t. 5807.) S. A tall-growing plant with lanceolate fleshy l., and long pendent racemes of white fl., the whole plant clothed with bright red-brown hairs. [Perhaps *E. reflexa*, Lindl.]

Eria vittata. (*G. C.* 1882, xvii. 330.) G. An interesting species, with a lateral raceme of glabrous green fl. The sep., pet. and lip all striped with red. The lip is oblong, crenulated, and has five plaited lamellæ that are edged with red. North India.

Erica hyemalis alba. (*Fl. and P.* 1882, 26.) Ericaceæ. G. var. with white fl.

Erica maweana. (*Fl. and P.* 1882, 75.) H. heath, in the way of *E. Tetralix*, forming bushes 1–1½ ft. high, with purplish crimson fl., which appear in autumn.

Erica spenceriana. (*Fl. des S.* t. 2323.) G. heath of hybrid origin, in the way of *E. perspicua*, with crowded l., and ascending tubular pink fl.

Erigeron aurantiacus. (*Gfl.* t. 987, f. 1.) Compositæ. H. per., about 6 in. high. Radical l. oblanceolate or spathulate. Stem-l. sessile, lanceolate, acuminate. Stem simple, one-headed. Ray-florets bright orange. Disk yellow. Turkestan.

Erigeron glabellus mollis. (*Gard.* 1896, xlix. 81.) H. A pubescent var. with large rose-coloured fl. Colorado.

Erigeron hybridus roseus. (*Ill. H.* 1896, 301, f. 26.) H. A garden hybrid between *E. aurantiacus* and *E. Villarsii*.

Erigeron multiradiatus. (*B. M.* t. 6530.) H. per. Radical l. 4–8 in. long, oblanceolate, narrowed into a long petiole, distantly toothed, 3-5-nerved: stem-l. sessile, ovate-lanceolate, acute. Fl.-heads solitary on long peduncles. 2 in. in diam.; rays bright purple: disk yellow. Temperate Himalaya.

Erigeron speciosus superbus. (*Gard.* 1889, xxxvi. 377.) H. Garden var., with much larger blooms than the type.

Eriocnema Sanderæ. (*G. M.* 1894, 658, f.) Melastomaceæ. S. A seedling var. of *Bertolonia marmorata*.

Eriopsis Sprucei. (*G. C.* 1884, xxi. 145.) Orchidaceæ. G. Pseudobulb cylindrical. L. cuneate-oblong, acute: raceme long, cylindrical. Sep. and pet. light yellow, the latter with red borders: side lobes of lip nearly circular, whitish with red dots: middle lobe transversely elliptic, with a broad stalk, having 2 acute horns on the middle of the disk, light yellow with mauve spots on the stalk; the disk white. Brazil.

Eriospermum brevipes. (*G. C.* 1880 xiv. 231.) Liliaceæ. G. tuber. L. large, ovate, hairy beneath. Scape 1½–2 ft. high. Perianth campanulate: segments oblong, incurved at the tip, white with a green keel. South Africa.

Eriostemon obovalis, flore pluralis. (*W. G.* 1888, 118.) Rutaceæ. G. Garden variety.

Eritrichium barbigerum. (*Gfl.* 1886, 358, 359. f. 42; *R. H.* 1885, 557, f. 99.) Boraginaceæ. H. annual, very like a *Myosotis* with lanceolate l. and branching scorpioid cymes of small white fl. The linear calyx-lobes are about ¼ in. long, and the whole plant is clothed with long spreading hairs. [*Krynitzkia barbigera*, A. Gray.] California.

Eritrichium nothofulvum. (*W. G.* 1892, 439, f. 70.) H. annual; in general appearance very like a Forget-me-not, with sweet scented white fl. [*Plagiobothrys nothofulvus*, A. Gray.] California.

Erycina echinata. (*B. M.* t. 7389.) Orchidaceæ. S. An *Oncidium*-like little plant with a 2-leaved pseudobulb and tufted bracteate stems. L. 2–4 in. long, green with brown stripes. Raceme axillary, 6 in. long, bearing about a dozen yellow fl. Fl. nearly 1 in. in diameter, with a large flat 3-lobed lip. Mexico.

Erysimum pulchellum. (*R. H.* 1880, 412, f. 86.) Cruciferæ. H. per. herb. Stem 8–12 in. high. Radical l. obovate, with projecting teeth; stem-l. more or less pinnatifid. Fl. rather large, saffron-yellow.

Erysimum Wahlenbergii. (*G. C.* 1891, x. 190.) H. Stem 2 ft. high, branched. L. lanceolate, toothed. Fl. bright yellow. Transylvania.

Erythea armata. (*Gfl.* 1887, 279, f. 74, where it is wrongly named *E. aculeata*; *G. C.* 1896, xx. 425, f.) Palmæ. S. Palm with large fan-shaped palmatisect glaucous l., armed with spines on the margins of the petioles and tomentose paniculate pendent spadices. California.

Erythræa diffusa. (*Fl. and P.* 1882, 36.) Gentianaceæ. H. A profuse-flowering dwarf per. of trailing habit. L. small, elliptic. Fl. rosy. [*E. Massoni*, Sweet.]

Erythræa pulchella diffusa. (*Gfl.* t. 1038.) H. Floriferous var., with elliptic obtuse l., and cymose umbellate bright pink fl., ¾ in. in diam. [*E. Massoni*, Sweet.]

Erythræa venusta. (*B. M.* t. 6396.) H. A large-flowered species, with sessile opposite ovate or ovate-oblong obtuse l. ½–1 in. long, and fl. 1 in. in diam., deep rose with a whitish eye; lobes of the corolla elliptic-oblong, obtuse. California.

Erythrina compacta. (*R. H.* 1882, 348.) Leguminosæ. G. A dwarf free-flowering form of *E. Crista-galli*.

Erythrina constantiana. (*R. H.* 1896, 524, t.; *Gard.* 1896, 1. 408.) G. The solitary tree which has been named as above exists in the garden of M. A. Constant, Golfe Juan, Alpes Maritimes. It is about 30 ft. high with a trunk 4 ft. in diameter at the base. Branches and trunk covered with persistent spines. Racemes of large scarlet fl. towards the extremities of the branches. The species is a near ally of *E. caffra*. Origin unknown.

Erythrina insignis. (*Gfl.* t. 988.) G. or S. shrub, somewhat spiny, with large trifoliolate l., and dense many-flowered racemes of large bright scarlet fl.

Erythrina marmorata. (*Veitch Cat.* 1879, 25, f. 12; *Fl. des S.* tt. 2379–80.) S. shr. L. pinnately trifoliate; leaflets broadly ovate, acute, subtruncate at the base, green blotched and spotted with white in a very effective manner. South Sea Islands.

Erythrina spectabilis. (*Williams' Cat.* 1881, 35.) S. shr. of dense compact growth, having fine bold variegation. The l. are chiefly variegated with yellow, but change with the different growth of the plant.

Erythrina Vespertilio. (*Bull Cat.* 1885, 14, f.) G. Shr. of singular appearance; stems slender and erect; l. trifoliolate on rather long petioles, and the leaflets somewhat resembling a bat with outspread wings; fl. numerous, in showy erect racemes. West Australia.

Erythronium Hendersoni. (*B. M.* t. 7017; *G. C.* 1888, iii. 652, 653, f. 86; *G. and F.* 1888, 317, f. 50.) Liliaceæ. H. L. 2, ovate or ovate-lanceolate, obtuse, dull green, faintly spotted with brown. Scape 6–8 in long, 1–2-flowered. Fl. drooping, 1½ in. in diam., the segments lanceolate, recurving, pale lilac, with a dark purple spot at the base. Oregon.

Erythronium Johnsoni. (*G. C.* 1896, xix. 548, f. 83.) H. with large reddish-pink fl., deeper-coloured on the outside and with a zone of deep pink at the base. Oregon.

Erythronium revolutum. (*G. C.* 1876, v. 138.) H. per., resembling *E. Dens-canis*, but without blotches on the leaves. Scape 1-flowered. Fl. pendulous, 15–16 lin. deep, purple, with a bright yellow blotch above the base of each segment. Filaments unappendaged, yellow in the upper half. Vancouver Island.

Escallonia revoluta. (*B. M.* t. 6949.) Saxifragaceæ. H. shr., autumn-flowering, much branched and softly pubescent. L. obovate, acute, toothed, with recurved margins, 1–1½ in. long. Racemes panicled at the ends of the branches. Fl. white, ½ in. long. Chile.

Escallonia rubra punctata. (*B. M.* t. 6599.) H H. shr. with elliptic-ovate acute serrate l., and few-flowered terminal racemes of deep red fl. This var., if var. it be, is easily distinguished from *E. rubra* by the presence of stalked glands on the young shoots, peduncles, &c. Chile.

Eschscholtzia cucullata. (*G. C.* 1894, xvi. 434.) Papaveraceæ. H. A remarkable species with incurved l. and small lemon-yellow fl. California.

Eschscholtzia maritima. (*Gfl.* 1894, 48.) H. This differs from *E. californica* in its greyish white l. and in its lighter yellow fl. with an orange blotch at the base of each pet.

Esmeralda bella. (*G. C.* 1888, iii. 136; *Bull Cat.* 1888, 8; *O.* 1888, 194.) Orchidaceæ. S. A fine plant, with short broad shining l., unequally bilobed at the apex, and fl. similar in form to those of *E. Cathcarti*. Sep. and pet. straight, light ochre, barred with brown. Lip white, margined with brown on the very broad tumid front lobe, and striped with purple-brown on the side lobes, bearing a roundish basal tubercle, and a long tumid ligulate body, extending nearly to the apex, where there is another roundish tubercle. [*Arachnanthe.*]

Esmeralda Clarkei. (*G. C.* 1886, xxvi. 552.) S. [*Arachnanthe Clarkei*, Rolfe; *B. M.* t. 7077.]

Euadenia eminens. (*B. M.* t. 6578.) Capparidaceæ. S. Soft-wooded shrub, remarkable for its curious fl. L. trifoliolate; leaflets sessile, oblong-lanceolate, acuminate, dark green. Infl. terminal, corymbose-racemose; the long pedicels, calyx and stamens green; the four petals light yellow. The two lower pet. are deflexed, linear, spathulate, ¾ in. long; the two upper are erect, 4 in. long, lanceolate-spathulate, the claw very long; these give the fl. a very curious appearance. West Tropical Africa.

Eucalyptus andreana. (*R. H.* 1890, 346, f. 105–106.) Myrtaceæ. G. tree, in the way of *E. amygdalina*, with lanceolate acuminate l., and globose clusters of small fl. on short peduncles, succeeded by dense clusters of globose fruits about the size of a small pea, with a depressed rim. Australia.

Eucalyptus ficifolia. (*Fl. and P.* 1882, 26; *Bull Cat.* 1882, 16; *G. C.* 1883, xx. 465, f.) G. shr. with ovate or ovate-lanceolate l., and a profusion of crimson fl. Australia.

Eucalyptus staigeriana. (*G. C.* 1889, v. 437, f. 81.) G. One of the few species with fragant foliage. Fl. white. Hardy at La Mortola, where it has been cultivated some years.

Eucalyptus urnigera. (*G. C.* 1888, iii. 460, f. 64; *G. and F.* 1888, 168.) G. or H. tree. L. narrow lanceolate, acute, dull green, coriaceous, 3 in. long, ¾ in. broad, on petioles 1 in. long. Peduncles axillary ¼–⅓ in. long, 1–4-flowered. Buds elongate-pear-shaped, with a short conical cap. Fr. about ½ long, somewhat urn-shaped. Tasmania.

Eucharis bakeriana. (*G. C.* 1890, vii. 416; *Gfl.* 1890, 312; *B. M.* t. 7144.) Amaryllidaceæ. S. A large-flowered species, with broadly ovate l. and fl. like those of *E. grandiflora*, with the corona of *E. candida*. Colombia.

Eucharis candida. (*Bull Cat.* 1876, 9; *Gfl.* 1878, 244, f.) S. bulb. L. obovate-oblong, acuminate, cuneate at base, Scape compressed, bearing an umbel of several white fl., with yellowish-tinted coronas. Colombia.

Eucharis elmetana. (*Sand. Cat.* 1896, 46.) G. A garden hybrid between *E. Sanderii* and *E. grandiflora*.

Eucharis grandiflora Moorei. (*G. C.* 1888, iv. 628.) S. L. roundish, much smaller than those of *E. grandiflora*; fl. also rather smaller, having the corona white inside, with a fine yellow line where the filaments run down; the teeth between the filaments are large and acute.

Eucharis Lehmanni. (*Gfl.* t. 1300, f. 1; *Regel, Descr.* 7.) S. L. 2, elliptic-oblong. Fl. white, about four in an umbel, 1½ in. in diam.; corona deeply 12-toothed. Popayan, Colombia.

Eucharis Lowii. (*G. C.* 1893, xiii 455, 538, f. 78.) S. A supposed natural hybrid between *E. grandiflora* and *E. Sanderii*. It was imported, with the last-named species, from New Grenada. The fl. are pure white and as large as those of *E. grandiflora*.

Eucharis Mastersii. (*B. M.* t. 6831.) L. much like those of *E. grandiflora*. Fl. two to a scape. Perianth-tube 2–2½ in. long, slender, funnel-shaped in the throat: limb pure white, 3 in. diam.; segments elliptic. Staminal cup 12-toothed, striped with green.

Eucharis Sanderii. (*G. C.* 1883, xviii. 712; xix. 349, f. 53; *Fl. and P.* 1883, 57; *Bull Cat.* 1883, 14; *B. M.* t. 6676.) S. with stalked elliptic l., and few-flowered umbels of white fl., which differ from those of the other species in having a shorter tube and no corona.

Eucharis Sanderii multiflora. (*B. M.* t. 6831.) S. Umbel 5–6-flowered; fl. small. Colombia.

Eucharis Stevensii. (*G. C.* 1890, vii. 641.) S. A hybrid between *E. candida* and *E. Sanderii*.

Euchlæna luxurians. (*B. M.* t. 6414.) Gramineæ. S. or G. This is the plant known as *Reana luxurians*. It is a tall-growing grass of tufted habit, and having much the appearance of maize, the male spikelets being in a terminal corymb, and the female axillary; the long drooping purple styles of the latter have a very pretty effect. Guatemala.

Eucomis amaryllidifolia. (*G. C.* 1878, x. 492.) Liliaceæ. G. Near *E. undulata*, but differing in its narrow uncrisped l. and subspicate infl. L. 5–6, contemporary with the fl., fleshy, 12–15 in. long, 15–16 lin. broad two-thirds the way up, narrowed gradually to the base, obtuse, unspotted, concave in lower half. Scape under 1 ft. long, terete, unspotted; raceme 2–3 in. long, dense, 1½ in. thick, with a coma of 15–20 oblong l. 1–1¼ in. long, with crisped cartilaginous margins. Perianth green, ½ in. long; segments oblong. Filaments green. Ovary pale yellow: style white. South Africa.

Eucomis bicolor. (*G. C.* 1878, x. 492; *B. M.* t. 6816.) G. L. 5–6, contemporary with fl., sub-erect, 1 ft. long, 3–4 in. broad at middle, oblong, crisped, unspotted. Scape shorter than l., terete, unspotted. Raceme dense, 3–4 in. long, over 2 in. thick, with a coma of 20–30 congested oblong l. with purple crisped edges. Perianth pale green with a sharp purple edge. Filaments deltoid, dark purple. Ovary green; style dark purple. Natal.

Eucomis pallidiflora. (*G. C.* 1887, ii. 154.) G. L. oblanceolate, bright green, 2 ft. or more long, by 4–5 in. broad. Fl.-stem 3 ft. high, with a long raceme of greenish-white fl., ¼ in. in diam. South Africa.

Eucomis robusta. (*G. C.* 1894, xvi 562.) G. Near *E. regia*, from which it differs by its narrow long ensiform acute l., which are 2 ft. long. Scape short, 1 in. in diameter. Raceme dense, 6 in. to 8 in. long. Fl. campanulate, green, tinged with brown. Natal.

Eucomis zambesiaca. (*G. C.* 1886, xxv. 9.) G. Allied to *E. punctata*, but the l. are firmer, and, like the scape, not spotted, the raceme shorter and denser, and the pedicels shorter. Fl. green. East Tropical Africa.

Eucryphia Billiardieri Milligani. (*B. M.* t. 7200; *Gfl.* 1891, 611.) Rosaceæ. G. A handsome white-flowered evergreen tree or shrub. Tasmania.

Eugenia Garberi. (*G. and F.* 1889, 28, f. 87.) Myrtaceæ. G. A tree 50 to 60 ft. high, trunk 18 in. in diameter; with ovate oblong l. and small axillary clusters of white fl. Florida.

Eugenia magnifica. (*Lind. Cat.* 1878, 4.) S. shrub with large shining bullate l., and small corymbs of pale rose-tinted fl., arising from the protuberances which cover the stem from its base. New Caledonia.

Eugenia oleoides. (*Fl. des S.* t. 2327.) S. floriferous shrub. L. opposite, 1 in. long, narrowly linear-lanceolate, green. Fl. rather small, white, arranged in terminal panicled racemes. Colombia.

Eulalia gracillima univittata. (*R. H.* 1889, 516.) Gramineæ. H. grass of ornamental character, forming large tufts, and having long gracefully bent l., banded along their middle with yellow. [*Miscanthus sinensis*, Anderss.; *B. M.* t. 7304.]

Eulophia bella. (*G. C.* 1889, vi. 210.) Orchidaceæ. S. A species equal in size to *E. streptopetala*. Scape about 2 ft. high, bearing a dozen fl., each 1¼ in. across, and coloured yellow, white, carmine, rose, green, and brown. Zambesi.

Eulophia callichroma. (*G. C.* 1889, vi. 298.) S. L. linear; fl. yellow. Zambesi.

Eulophia congoensis. (*L.* xi. t. 486.) S. [*E. guineensis*, Lindl.] Congo.

Eulophia deflexa. (*K. B.* 1895, 192.) S. Allied to *E. barbata*. L. lanceolate, about 1 ft. long; scape 2 ft. long bearing a lax raceme of purple and lilac fl. 2 in. across, the lip fringed with white. Natal.

Eulophia gigantea. (*K. B.* 1889. 90.) S. A fine plant, growing several ft. high. L. 3–4 ft. long, cuneate, oblong-acuminate, plicate. Raceme lax. Fl. 2½ in. in diam. Sep. narrow, cuneate-oblong, greenish. Pet. very large.

elliptic-oblong, lilac. Lip with a very stout short blunt spur, and 3 yellow keels on the disk at the base of the broad rounded front lobe, which is purple with darker stripes. [*Lissochilus giganteus*, Welw. *G. C.* 1888, iii. 616-7, f. 83 ; iv. 353.] West Tropical Africa.

Eulophia guineensis purpurata. (*W.O.A.* t. 89.) S. A showy plant, with globose tubers, bearing 2-3 lanceolate acuminate green l. and a lax raceme of handsome fl. Sep. and pet. narrow lanceolate, acuminate, dark dull purple. Lip large, the front lobe elliptic-ovate acute, bright rose-purple. West Tropical Africa.

Eulophia maculata. (*Ill.* t. 1285.) S. Orchid, with ovoid grooved pseudobulbs 1 in. long, bearing one cuneate-oblong l. 3–4 in. long by 1½ in. broad, handsomely variegated with irregular bands of dark green and greyish, and an erect slender lax spike of not very large fl. Sep. lanceolate, acute, reddish-brown. Pet. narrower, erect, white, forming with the upper sep. a kind of hood. Lip with erect side lobes, a broadly ovate front lobe, white with two red spots. [*E. Ledienii*, Stein.] Guinea.

Eulophia Mackenii. (*G. C.* 1892, xii. 583.) S. Closely resembling *E. maculata*, Reichb. f., but with broader l. and fl.-segments. Natal.

Eulophia megistophylla. (*G. C.* 1885, xxiii. 787.) S. L. more than 1 ft. long by a span broad. Fl. paniculate : sep. lanceolate : pet. broader : lip 4-lobed, lobes obtuse : spur very short. Comoro Islands.

Eulophia nuda. (*G. C.* 1891, ix. 701.) S. Raceme erect, preceding the l. ; fl. of medium size, rosy lilac. India.

Eulophia pulchra. (*G. C.* 1882, xvii. 732 ; *Ill. H.* 1893, t. 181.) S. A large species with 2 oblong acute l., 2 ft. long and 7 in. broad. Raceme with very numerous fl. Sep. and pet. light yellowish green, the latter streaked with purple, as is also the lip. Madagascar.

—— Var. **divergens.** (*G. C.* 1884, xxii. 102.) S. A slight form having the lip broader in front and going out into 2 retuse diverging shanks.

Eulophia scripta. (*G. C.* 1878, x. 332.) S. Rather pretty, with columnar pseudobulbs, narrow l., and panicles of greenish-yellow fl. blotched with brown. Madagascar.

Eulophia Zeyheri. (*B. M.* t. 7330.) S. Roots tuberous, bearing annual ensiform l. 18 in. long and an erect scape over 1 ft. long, bearing at the top 6–10 handsome yellow fl. with purple-brown markings on the lip. [*E. bicolor*, Reichb. f. & Sond.] South Africa.

Eulophiella Elizabethæ. (*L.* vii. t. 325 : *J. O.* iii. 96. f. 11 ; *B. M.* t. 7387.) Orchidaceæ. S. Large plant, with white fl. having a yellow lip, and the back of the sep., scape, and ovaries dull purple. Madagascar.

Eulophiella peetersiana. (*G. and F.* 1896, 514 : *B. M.* tt. 7612–3.) S. Fl. large, rose-coloured in strong axillary spikes. The rhizomes are thin, *Iris*-like and yellowish-white ; the l. are 4 in. in diam. at the base. Madagascar.

Euonymus Carrierei. (*Fl. and P.* 1881, 171 ; *R. H.* 1881, 373.) Celastraceæ. H. shr. of spreading habit, with trailing branches. L. persistent, shining, coriaceous, elliptic, obtuse, toothed, dark green above. Fl. small, green, in axillary corymbs.

Euonymus japonica Chouveti. (*R. H.* 1887, 89.) H.

—— Var. **columnaris.** (*R. H.* 1887, 89.) H.

—— Var. **fastigiata.** (*R. H.* 1875, 260.) H. A garden variety raised from seed, with erect fastigiate branches.

Euonymus pulchellus, foliis variegatis. (*R. H.* 1890, 514.) H. A dwarf much branched garden variety, with small variegated l.

Eupatorium grandiflorum. (*R. H.* 1882, 384, t.) Compositæ. H. per., with rugose cordate acute serrate l., and large terminal corymbs of reddish fl.-heads. An ornamental species probably already known under some other name.

Eupatorium japonicum. (*R. H.* 1889, 163.) H. herbaceous per. in the way of *E. cannabinum*, with opposite trifoliate l., pubescent beneath, and corymbs of white fl. Japan ; Formosa.

Eupatorium probum. (*G. C.* 1890, vii. 321, f.) G. It has an erect habit, hairy ovate l., and terminal white fl.-heads. Peru.

Eupatorium reticulatum. (*R. H.* 1878, 439.) G. per., robust and floriferous. L. opposite, cordate, acuminate, villous, bullate-reticulate, crenulate. Infl. corymbose; fl.-heads small, whitish.

Eupatorium serrulatum. (*R. H.* 1894, 304. t.) G. A shr. with shortly-stalked bright green l. and heads of rosy-lilac fl. Uruguay.

Euphorbia Fournieri. (*R. H.* 1896, 226, f.) S. This is a plant cultivated long ago in this country but soon lost. [It is identical with *E. lophogona*, Paxt. not Lam.] Madagascar.

Euphorbia heterophylla. (*W. G.* 1889, 485, f. 77.) H. annual, with pandurate or variously shaped l., the bracts being of a red colour at their base. North America.

Euphorbia Sipolisii. (*K. B.* 1893, 158.) S. A species of the section *Euphorbium*. Stems erect, branching, winged, leafless, ½ in. in diameter; fl. small in sessile cymes. Brazil.

Eurotia lanata. (*Späth Cat.* 1894–5.) Chenopodiaceæ. H. An erect shrub with thick-felted twigs, narrow whitish-gray l., and reddish fruits. Western North America.

Eurya vitiensis. (*Gfl.* 1887, 130.) Ternstrœmiaceæ. S. tree with elliptic-lanceolate or oblong serrulate l., acuminate at both ends, of a shining green, and small axillary unisexual fl., the males fascicled, the females usually in pairs. Fiji.

Euryangium Sumbul. (*Gfl.* 1879, 87.) Umbelliferæ. H. A tall-growing perennial whose fetid roots furnish the Sumbul of the Pharmacopœia. [*Ferula Sumbul*, Hook. f.] Turkestan.

Eurybia lirata quercifolia. (*Gfl.* t. 884.) Compositæ. G. shrub, differing from the type in having the l. oblong-lanceolate, bullate, scabrid above with stellate hairs, densely clothed beneath with reddish stellate hairs. [*Olearia stellulata*, DC. var.] Australia.

Eurygania ovata. (*B. M.* t. 6393.) Vacciniaceæ. S. evergreen rambling glabrous shr. Stems stout, terete, green. L. alternate, ovate, acute, serrulate, 1½–2 in. long, deep shining green, with pale margins. Fl. in short axillary racemes on long spreading pedicels; calyx shortly 5-toothed, campanulate, and, as well as the pedicels, purple-red; corolla urceolate, crimson with a whitish shortly 5-lobed limb. Stamens included; filaments connate in a tube; anthers long, bifid at apex, opening by apical slits. Peru.

Eustoma exaltatum. (*Fl. and P.* 1882, 12.) Gentianaceæ. G. A handsome biennial, with opposite elliptic stem-clasping glaucous l., and funnel-shaped deep blue fl. spotted at the base. Mexico.

Eustrephus Brownii. (*Gfl.* 1888, 596, 132.) Liliaceæ. G. climber. [*E. latifolius*, R. Br.]

Exacum affine. (*G. C.* 1883, xix. 368; *Fl. and P.* 1883. 57; *Gfl.* t. 1108; *B. M.* t. 6824.) Gentianaceæ. S. annual about 6 in. high, with dark green ovate 3-nerved l., and terminal clusters of violet-purple fl., with yellow anthers. Socotra.

Exarrhena macrantha. (*B. M.* t. 7291.) Boraginaceæ. H. H. An erect robust herb with hairy stems and l.; the latter lanceolate, 2 in. to 4 in. long; cymes terminal bifurcate, bearing yellow fl. ½ in. long. New Zealand.

Exocarpus cupressiformis. (*Gfl.* 1888, 288, f. 60.) G. Santalaceæ. Australia.

Fagus purpurea roseo-marginata. (*G. C.* 1888, iii. 779.) Cupuliferæ. H. A garden var. of the Copper Beech, with a pink edge to the young leaves.

Fagus rotundifolia. (*G. C.* 1894, xv. 762.) H. A round-leaved var. of the common beech.

Fagus sylvatica atropurpurea Rohani. (*W. G.* 1894, 273.) H. A form of garden origin in which the l. are similar to those of the Fern-leaved Beech in form, but like those of the Copper Beech in colour.

—— Var. **conglomerata Bandrilleri.** (*W. G.* 1888, 347; *G. and F.* 1888, 468.) H.

—— Var. **foliis striatis.** (*G. C.* 1892, xii. 669.) H. Discovered in a forest in Hesse. Soon after opening, the l. begin to show a regular golden striation, parallel with the nerves, which lasts till the l. fall off.

Fagus sylvatica Zlatia. (*G. C.* 1892, xii. 669.) H. A form having golden-tinted l. Servia.

—— Var. **tricolor.** (*R. H.* 1885, 311.) H. A var. with dark purplish-green l. spotted with bright carmine-rose, and shaded with rosy-white.

Fallugia paradoxa. (*B. M.* t. 6660: *Fl. and P.* 1883, 10.) Rosaceæ. G. A free-flowering bush, 2–4 ft. high, with small cuneate 3–7-fid l., green above, white beneath; the slender branches terminating in a solitary fl. or a few-flowered raceme of pretty white fl., 1–1½ in. in diam. New Mexico.

Faradaya papuana. (*Bull Cat.* 1884, 13.) Verbenaceæ. S. A shrubby climber with opposite lanceolate bullate l., and corymbose panicles of white salver-shaped fl. New Guinea.

Faradaya splendida. (*G. C.* 1890, viii. 300; *B. M.* t. 7178.) S. A stout climber, with large shining green l. and white fragrant tubular fl. in loose terminal panicles. Australia.

Fedia Cornucopiæ candidissima. (*B. T. O.* 1895, 19.) Valerianaceæ. H. A form differing from the type in having white flowers.

—— Var. **floribunda plena.** (*Gfl.* t. 1218.) H. A var. with double pink fl. It forms dwarf hemispherical tufts, and is very floriferous.

Felicia abyssinica. (*F. G.* 1895, 439, f. 43.) Compositæ. H. H. Dwarf tufted species with lilac fl.-heads like those of *Aster alpinus*. Tropical Africa.

Fendlera rupicola. (*G. and F.* 1888, 236.) Saxifragaceæ. H. shr. 2–4 ft. high, with small opposite entire subsessile l., and solitary large white showy fl., with long conspicuous stamens. Texas.

Ferula fœtidissima. (*Gfl.* t. 994.) Umbelliferæ. H. herb, with a tall terete glabrous branched stem, bearing a few bi-tripinnatifid broadly sheathed l. Umbels compound, without involucres or involucels, many-rayed. Fl. small, yellowish-white. Turkestan.

Festuca Crinum-ursi. (*F. G.* 1890, 208.) Gramineæ. H. ornamental grass, 2–3 in. high. No further description.

Fevillea Moorei. (*B. M.* t. 6356.) Cucurbitaceæ. S. free-flowering climber. Quite glabrous. L. alternate, ovate, acuminate, 3–5 in. long, 2–3 in. broad, 3-nerved. Tendrils bifurcate. Panicles axillary, several-flowered. Corolla of male fl. ¾ in. in diam., rotate, pale brick-red. Staminodes connate into a bright yellow 5-lobed disk. Stamens 5, erect; anthers recurved, yellow. Tropical America (?).

Ficus Canoni. (*G. C.* 1888, iii. 9; *H. G.* 1888, 124.) Urticaceæ. S. shr. Known in gardens as *Artocarpus Canoni*. Society Islands.

Ficus Cavroni. (*R. H.* 1887, 329.) S. shr. with large shortly petiolate cuneate-obovate obtuse l., growing to 18 in. long by 9 in. broad, dark-green with yellowish-white midrib above, rusty beneath. Brazil.

Ficus elastica aureo-marginata. (*G. C.* 1882, xvii. 143.) S. L. broadly bordered with yellow.

Ficus exsculpta. (*Bull Cat.* 1879, 5, f. 1.) S. shr. with handsome evergreen foliage. L. oblong-lanceolate in outline, bipinnatifidly lobed; the lobes and sinuses obtusely rounded. South Sea Islands.

Ficus minima. (*R. H.* 1875, 120.) G. evergreen, like the well-known *F. stipularis*, but very much smaller in all its parts.

Ficus Roezlii. (*Bull Cat.* 1876, 9.) S. shrub. L. leathery, rounded at base, acuminate at apex, dark green above, reticulate below with deep wine-red veins. South America.

Forsythia intermedia. (*Gfl.* 1891, 395, 397, f. 82, 1–4.) Oleaceæ. H. shr. A garden hybrid between *F. suspensa* and *F. viridissima*.

Fourcroya cubensis inermis. (*B. M.* t. 6543.) Amaryllidaceæ. G. succulent per. differing from the type in its less rigid almost spineless l. Fl.-stem 10 ft. high. Fl. white, drooping, disposed in panicled racemes. [*Furcræa cubensis*, Vent. var. *inermis*, Baker.] Tropical America.

Fourcroya Roezlii. (*R. H.* 1887, 353, f. 71.) G. L. 4½ ft. long, 4 in. broad in the middle, narrowed towards the base, lanceolate, acuminate. Fl.-stem 10–12 ft. high, clothed with long sheathing

bracts on the unbranched part, paniculate above; flowering branches puberulous; fl. in clusters of 3-4, pale yellowish, $1\frac{3}{4}$ in. in diam. [*Furcræa Bedinghausii*, C. Koch; known also as *Roezlia regia* in gardens.] Mexico.

Fourcroya tuberosa. (*R. H.* 1877, 233–5.) G. per. with the habit of a caulescent *Agave*. L. 2 ft. long, 3–4 in. broad, lanceolate, acuminate at apex, attenuate at base, bright green, rough beneath, thick; margins distantly toothed. Scape 4–6 ft. high; panicle large, lax. Fl. large, pale yellow. Fr. abortive, replaced by scaly bulbs or large deciduous buds, which readily reproduce the plant. [*Furcræa tuberosa*, Ait.]

Franseria artemisioides. (*Damm. Cat.* 1890–91, 78, 81, f. 48.) Compositæ. H. H. herbaceous plant 5–6 ft. high, with bipinnatifidly lobed l., and unisexual fl.-heads in terminal spikes, the female heads being at the basal part of the spike. Andes of Chile.

Fraxinus alba, foliis argenteo-marginatis. (*R. H.* 1886, 398.) Oleaceæ. H. An ornamental form, having the leaflets bordered with pale yellow, or, in the young l., with rose.

Fraxinus anomala. (*M. D. G.* 1896. 26.) H. A small tree with l. mostly reduced to a single broadly ovate leaflet. Colorado, &c.

Fraxinus aucubæfolia nova. (*R. H.* 1887, 63.) H. tree.

Fraxinus bungeana. (*G. and F.* 1894, 4, f. 1.) H. A small tree belonging to the section *Ornus*. Northern China.

Fraxinus excelsior, foliis aureis. (*R. H.* 1878, 380.) H. tree, an ornamental var. with yellow l., which when young are tinted with violet.

Fraxinus Mariesii. (*B. M.* t. 6678; *G. C.* 1883, xix. 351.) H. ornamental tree, one of the "Flowering Ashes," with pinnate l. of four oblong-lanceolate subserrate subsessile leaflets, and one petiolulate terminal one, and with terminal panicles of numerous small white fl. China.

Fraxinus raibocarpa. (*F. G.* 1892. 211, f. 36.) H. tree of graceful habit: the l. with but few and rather small leaflets, and the fr. sickle-shaped. Central Asia.

Fraxinus Regelii. (*Nat. Arb. Zosch.* 1889–1890, 7.) H. Ash-tree of ornamental character; no description given. Central Asia.

Fraxinus rhyncophylla. (*G. and F.* 1893, vi. 484, f. 70.) H. Easily distinguished from other species by its winter buds which are globose, $\frac{1}{2}$ in. in diameter, with broad scales covered with a coat of thick rufous tomentum. Northern China.

Fraxinus turkestanica. (*R. H.* 1887, 63.) H. tree. L. pinnate, dark green; leaflets five, cuspidate, coarsely toothed. Turkestan.

Freesia refracta alba. (*R. H.* 1881, 207. Iridaceæ. G. var., with white fl. having two orange spots on the lower segments. South Africa.

—— Var. **major.** (*G. C.* 1882, xvii. 331.) G. Fl. fragrant, pale cream-coloured, having an orange blotch on the base of the lower segment.

Fritillaria armena. (*B. M.* t. 6365.) Liliaceæ. H. A dwarf species allied to *F. tulipifolia* and *F. graeca*. Bulb-scales 2–3, thick and fleshy. Stem 5–7 in. high, with 3–5 lanceolate acuminate erect pale green l. Fl. solitary, drooping, about 1 in. long, dull lurid purple, not tessellated; segments of perianth minutely toothed on margin; style obscurely trifid. Armenia.

—— Var. **fusco-lutea.** (*G. C.* 1887, i. 639.) H. bulb, having the fl. bright yellow inside and tinged with coppery-brown outside.

Fritillaria aurea. (*G. C.* 1876, v. 720; *Gfl.* t. 840.) H. Glaucescent, about 6 in. high. L. linear, fleshy, 2–3 in. long, $\frac{1}{4}$–$\frac{3}{8}$ in. broad, lower ones in whorls of 3; bract solitary. Fl. in shape like *F. Meleagris*, but bright yellow, with abundant minute nearly black quadrangular spots. Taurus.

Fritillaria Bornmuelleri. (*Gard.* 1896, xlix. 282.) H. A species allied to *F. aurea*, and, like that species, with golden-yellow fl.

Fritillaria bucharica. (*Gfl.* t. 1171; *B. M.* t. 7080.) H. An interesting but not very showy species. Bulb globose; stem 1 ft. long; l. numerous, sessile, alternate, lanceolate, 3–4 in. long. Infl. a lax many-flowered raceme; bracts large, foliaceous, linear or lanceolate:

perianth greenish-white, campanulate, 1 in. long, not tessellated : segments oblong. Central Asia.

Fritillaria Burneti. (*G. C.* 1879, xi. 685, f. 98.) H. In the way of *F. Meleagris*, 6–8 in. high, with about 6 linear-lanceolate slightly glaucous l., and solitary nodding bell-shaped fl. about 2 in. long, lurid brownish-red, tessellated with white ; slightly glaucous outside. [*F. tubeformis*, Gren. & Godr.] South Europe.

Fritillaria canaliculata. (*G. C.* 1890, vii. 288 ; *Gfl.* 1890, 395 ; *W. G.* 1890, 152, 203.) H. Resembling *F. pyrenaica*, but belonging to the section *Amblirion*. Fl. 3–5, campanulate, purplish. L. linear, glaucous, 3–4 in. long. Kurdistan.

Fritillaria citrina. (*Damm. Cat.* 1893, 4.) H. species with bell-shaped pendulous fl., greenish outside and yellow within. Taurus.

Fritillaria contorta. (*G. C.* 1886, xxv. 681.) H. species, quite different from all the others in having the segments of the fl. all united (gamophyllous). L. 3–4, distant, lanceolate, somewhat fleshy. Fl. nodding, 1½–2 in. long, white.

Fritillaria hericaulis. (*G. C.* 1889, vi. 38.) H. Stem 4–5 in. high, one-headed, bearing four erect alternate sessile l. : lower l. oblong, obtuse ; upper l. lanceolate ; fl. dark purple, not tesselated obscurely pitted. A near ally of *F. armena*. Asia Minor.

Fritillaria Hookeri. (*B. M.* t. 6385.) H. [This is *Lilium Hookeri*, Baker, and a near ally of *L. thomsonianum*, Lindl.]

Fritillaria imperialis inodora purpurea. (*Gfl.* t. 1165.) H. var. with dark crimson fl. Bokhara.

Fritillaria kotschyana affinis. (*Gard.* 1895, xlvii. 298.) H. Like *F. aurea* in size and shape, dark crimson outside and lighter with yellow markings inside. [*F. nobilis*, Baker.]

Fritillaria Moggridgei. (*F. M.* t. 405.) H. bulb. A dwarfish plant, with large yellow fl., tesselated inside with brown. [*F. delphinensis*, Gren. var. *Moggridgei*.] South Europe.

Fritillaria pallidiflora. (*G. C.* 1883, xix. 573, f. 91 ; *B. M.* t. 6725.) H. bulb with ovate-lanceolate amplexicaul l., and 2–4 large drooping pale greenish-yellow fl., dotted with purple within. Siberia.

Fritillaria Perryi. (*Gfl.* 1886, 117.) H. A garden hybrid, between *F. recurva* and *F. lanceolata*.

Fritillaria raddeana. (*Gfl.* 1887, 583.) H. bulb, similar to *F. imperialis*, but distinguished by its rather dwarfer habit, recurved-spreading floral l., and pedicels longer than the greenish-yellow fl. Central Asia.

Fritillaria recurva. (*B. M.* t. 6264.) H. Bulb globose, scaly. Stem ½–2 ft. high, bearing 6-12 l. placed near the middle ; l. linear, sessile, 2–4 in. long ; the lower ones in whorls of 3-4 each. Fl. 2–8 in a terminal bracteate raceme, drooping : pedicels ½–1 in. long. Perianth campanulate, 1–1¼ in. long, bright scarlet outside, bright yellow bordered and spotted with scarlet inside. California.

Fritillaria Sewerzowi. (*B. M.* t. 6371.) H. Fl. purple. [Syn. *Korolkowia Sewerzowi*, Regel.]

—— Var. **bicolor.** (*Gfl.* t. 1181.) H. A remarkable var. with light olive-green fl., having a brownish V-shaped mark at the base of each segment. Alatau Mountains.

Fritillaria Walujewi. (*Gfl.* t. 993.) H. A fine species, 1 ft. high, with linear l. attenuated into a tendril, those at the middle of the stem verticillate. Fl. large, solitary, lead-coloured outside, purple-brown within, spotted with white. Alatau Mountains.

Fritillaria Whittallii. (*G. C.* 1893, xiii. 506.) H. Resembling *F. Meleagris* in habit, l. and fl. ; but with an orbicular instead of a linear nectary. Taurus.

Fritillaria zagrica. (*G. C.* 1893, xiii. 568.) H. Allied to *F. tulipifolia* and *F. armena*. Fl. lurid purple, untesselated, glaucous outside. Persia.

Fuchsia ampliata. (*B. M.* t. 6839.) Onagraceæ. G. L. elliptic-oblong, acute, in whorls of 3. Fl. axillary, drooping, scarlet, 2 in. long : calyx-tube narrow, funnel-shaped, the narrow lanceolate acute lobes slightly reflexed : petals broadly elliptic, ½ in. long. Andes of Ecuador.

Fuchsia boliviana. (*R. H.* 1876, t. 150.) G. In the way of *F. corymbiflora*, and only differing in being rather more dwarf, flowering a little earlier, and having deeper-coloured flowers. Bolivia.

Fuchsia magniflora. (*Williams' Cat.* 1885, 9.) G. A garden form of sturdy habit and free-flowering. Sep. crimson-scarlet, not reflexed; pet. deep violet.

Fuchsia pendula. (*R. H.* 1894, 470, ff. 174, 175.) G. A garden hybrid with pendulous branches.

Fuchsia semperflorens. (*W. G.* 1888. 244.) G. Garden hybrid.

Fuchsia triphylla. (*G. C.* 1882, xviii. 263; *B. M.* t. 6795.) G. The species upon which the genus was founded. It forms a dwarf round bush, having the l. opposite or in threes, and the shoots terminated by racemes of brilliant scarlet fl., 1½ in. long. San Domingo.

Fuchsia triphylla hybrida. (*M. G. Z.* 1894, 13, f.) G. A garden hybrid between *F. triphylla* and *F. corymbiflora*.

Funkia sieboldiana Fortunei. (*G. C.* 1876, vi. 36; *Gfl.* t. 867.) Liliaceæ. H. herb. per., differing from the type in its white fl. and roundish cordate cucullate l. Japan.

Furcræa albispina. (*G. C.* 1893, xiv. 586.) Amaryllidaceæ. G. A dwarf species allied to *F. depauperata*, with l. 18 in. long, 2 in. wide, with small whitish marginal prickles. Fl. greenish-white on an erect branched scape 6 ft. long. Central America.

Gahnia aspera. (*Gfl.* 1887, 130.) Cyperaceæ. S. Perhaps not the true *G. aspera*, Spreng. It is said to be an ornamental plant of *Arundo*-like habit with bright green channelled wavy lanceolate l., and a terminal infl. of whitish-yellow spikelets and red-yellow fruit. Fiji.

Gaillardia pulchella lorenziana. (*R. H.* 1881, 377, f. 93; *Gfl.* t. 1083; *B. H.* 1881, 208.) Compositæ. H. annual with globose heads of tubular 4-lobed florets, the rays being suppressed: colour variable. Also called *G. picta lorenziana*.

Galanthus Alleni. (*G. C.* 1891, ix. 298; *Gfl.* 1891, 246.) Amaryllidaceæ. H. Between *G. latifolius* and *G. caucasicus*. L. short, broad, glaucous. Fl. white. Caucasus.

Galanthus byzantinus. (*G. C.* 1893. xiii. 226.) H. Intermediate between *G. plicatus* and *G. Elwesii*. L. glaucous, broadly channelled down the face and distinctly reflexed at the edges, as in the former, and inner perianth-segments marked with green, as in the latter species.

Galanthus caucasicus. (*G. C.* 1887, i. 313.) H. A large-flowered species with glaucous truncate l. ½ in. broad, very glaucous peduncles, and fl. ¾–1 in. long, white, with the inner segments streaked with green inside, and marked outside with a green horseshoe-shaped spot around the deep notch. Caucasus.

Galanthus corcyrensis. (*Gard.* 1888, 139.) H. A small variety of *G. nivalis*. Corfu.

—— Var. **præcox.** (*J. of H.* 1893, xxvii. 549.) H. An early flowering form of the species with broader l.

Galanthus Elwesii robustus. (*G. C.* 1893, xiii. 226.) H. A robust var. with a large bulb and thick glaucous l. Asia Minor.

—— Var. **unguicularis.** (*J. of H.* 1894, xxviii. 179.) H. A var. of *G. Elwesii*, of erect habit, and distinguished by its claw-like segments. Asia Minor.

Galanthus Fosteri. (*G. C.* 1889, v. 458; *Gard.* 1889, xxxvi. 592.) H. L. bright green, 6 in. long, 1 in. wide. Peduncle slender, shorter than the l. Spathe green, linear-convolute, 2 in. long. Fl. white, outer seg. oblong spathulate, convex on back, 1–1½ in. long, inner segments obovate-cuneate. Asia Minor.

Galanthus gracilis. (*G. C.* 1893, xiii. 656.) H. Closely allied to *G. Elwesii*, being similar in height and having a large blotch at the base of the inner segments of the perianth. Bulgaria.

Galanthus grandiflorus. (*G. C.* 1893, xiii. 656.) H. species remarkable for its robust habit. L. recurved at the edge, very glaucous beneath. The fl. resemble those of the large forms of *G. nivalis*.

Galanthus Ikariæ. (*G. C.* 1893, xiii. 506.) H. A species with the bright green broad l. of *G. Fosteri*, the quadrate lobes of the inner segments of the perianth with the crisped edges of *G. Elwesii*, and the single apical blotch upon the inner segments like *G. nivalis*. Nikaria, Ægean Sea.

Galanthus maximus. (*G. C.* 1893, xiii. 354.) H. [*G. grandiflorus*, Baker.]

Galanthus nivalis Atkinsi. (*Gfl.* 1891, 246.) H. A garden var. with large fl.

—— Var. **Elsæ.** (*Gard.* 1891, xxxix. 243.) H. Nearly allied to *G. corcyrensis*, but having larger fl. and stouter l. Macedonia.

—— Var. **Racheliæ.** (*Gard.* 1891, xxxix. 243.) H. Allied to var. *Elsæ*, but more robust and with larger fl. Greece.

—— Var. **Scharloki.** (*G. C.* 1879, xi. 342, f. 48, misprinted *Shaylockii*.) H. A curious form, with two long opposite spathe valves, and a large green blotch on the outer tip of each of the inner perianth segments.

—— Var. **serotinus.** (*Jard.* 1888, 140.) H. A late-flowering variety.

Galanthus Olgæ. (*Jard.* 1888, 140; *G. and F.* 1888, 499, as *G. Reginæ-Olgæ*, and *G. Olgæ-Reginæ*.) H. L. 6–8 in. long, ¼ in. broad, very glaucous beneath. Fl. large, white, without spots on the inner segments. Greece.

Galanthus Perryi. (*G. C.* 1893, xiii. 258.) H. A species intermediate between *G. caucasicus* and *G. latifolius*. Caucasus.

Galanthus Scharloki. (*G. C.* 1888, iii. 243.) H. Snowdrop, with green lines on the outer perianth-segments, and two upright green leaf-like bracts. [*G. nivalis*, Linn. var.] Europe.

Galanthus umbricus. (*Damm. Cat.* 1889, 4.) H. A very early-flowering form of *G. nivalis*; the large bluish-green l. are produced after the fl., which resemble those of *G. Imperati*, white, with a greenish-yellow spot on the inner segments. Umbria, Italy.

Galeandra Cræsii. (*L.* ix, t. 391.) Orchidaceæ. S. Allied to *G. rillosa*. It has slender pseudobulbs about a foot long, blue-green l. and dropping racemes 9 in. long, bearing six or eight fl., each about 2 in. across; the sep. and pet. brown and the lip rosy. Brazil.

Galeandra descagnolleana. (*Ill. H.* 1887, t. 22.) S. Allied to *G. dives*, with rather slender fusiform stems, narrow lanceolate acuminate l., and terminal few-flowered racemes of moderate-sized fl. Sep. and pet. lanceolate, acute, ochreous-brown. Lip pale sulphur-white, with a purple blotch in front. Para.

Galeandra devoniana Delphina. (*L.* ii. t. 80; *G. C.* 1887, i. 486.) S. A distinct var. more slender in all its parts than the type. Sep. and pet. lanceolate, acute, reddish brown with yellowish margins. Lip large, white, veined with purple. Venezuela.

Galeandra flaveola. (*G. C.* 1887, i. 512; ii. 108; *L.* ii. t. 90.) S. A strong-growing species, with stems a span high, rather thick at the base, marked on the whitish sheaths with dark spots. L. cuneate, linear-lanceolate, acuminate, ½–¾ in. broad. Raceme several-flowered; sep. and pet. lanceolate, acuminate, yellowish-brown. Lip yellow, with very small hyaline purple dots. Anther with a blackish anchor-like terminal process. Venezuela.

Galeandra harveyana. (*G. C.* 1884, xx. 716.) S. A pretty species, with brown sep. and pet. and light yellow lip, having a tuft of hair on the disk.

Galeandra lagoensis. (*G. C.* 1894, xvi. 103.) S. A very singular species, with greenish sep. and large rose-crimson lip. Brazil.

Galeandra nivalis. (*Fl. and P.* 1882, 52; *Ill. H.* 1885, t. 555.) An interesting plant, with spindle-shaped glaucous green stems, linear-lanceolate l., and a nodding raceme of fl. with narrow reflexed rich olive sep. and pet., and a funnel-shaped lip with a singular spur, and a broad squarish front lobe, white, with a central rosy-purple stripe. Brazil.

Galtonia clavata. (*B. M.* t. 6885.) Liliaceæ. G. or H. H. bulb, not so ornamental as the well-known *G. candicans*, but similar in general appearance: differing in its smaller greenish-white fl. with shorter segments and lanceolate filaments. South Africa.

Gamochlamys heterandra. (*G. C.* 1876, vi. 164.) Araceæ. G. per. of remarkable character. Rootstock bearing a solitary l. Petiole 2 ft. long, channelled down the face, blade cordate-ovate, deeply pinnatifid, 1 ft. long, 8 in. broad, bright green. Peduncle shorter than petiole. Spathe green, boat-shaped, 4–5 in. long. Spadix adnate to spathe throughout its whole length. Female fl. about 30; ovary flask-shaped; male fl. in a row between the female ones on the upper half of the spadix. [*Spathantheum orbignyanum*, Schott.] Africa.

Gamolepis euriopoides. (*B. M.* t. 6249.) Compositæ. G. shrub, with erect leafy branches. 1–2 ft. high, glabrous. L. crowded, 1 in. long, trifid; segments linear, acute, rather fleshy. Peduncles terminal, slender, 1½–2 in. long. Heads solitary, 1 in. or more in diameter, radiate, bright yellow. South Africa.

Gardenia globosa. (*Bull Cat.* 1879, 5.) Rubiaceæ. S. evergreen shr., free-flowering, with lanceolate glabrous l., and terminal large white funnel-shaped fragrant fl., 1½ in. in diam., succeeded by globose fr. as large as a walnut. Natal.

Gasteria colubrina. (*G. C.* 1877, viii. 38.) Liliaceæ. G. species, closely resembling *G. acinacifolia* so far as the l. are concerned; these in adult plants are multifarious, acinaciform, straight or sub-falcate, 9–14 in. long, 1¼ in. broad, dark green, mottled with more or less confluent oval pale green spots. Fl.-stem simple or branched, 2–4 ft. high; racemes rather lax. Fl. 7½ lines long, curved, globose, inflated at base, pale coral-red, with pale green tips and darker green stripes, whereas in *G. acinacifolia* the fl. is 1½ in. long and scarcely inflated. South Africa.

Gasteria dicta. (*G. C.* 1876, vi. 68, f. 18.) G. Succulent per. of dwarf habit. L. spirally distichous, 4–4½ in. long, unequally 3-sided, smooth, dark green with numerous small round whitish spots forming irregular bands; margins cartilaginous, denticulate at apex. Fl.-stem 1½–2½ ft. high. Fl. racemose, numerous, coral-red with greenish tips. South Africa.

Gastrochilus albo-luteus. (*G. C.* 1894, xvi. 34.) Scitamineæ. S. In the way of *G. longifolius*, but the fl. are smaller with a flat white labellum, lined with bright yellow; l. oblong, 9 in. long, green. Andaman Islands.

Gastrochilus Curtisii. (*B. M.* t. 7363.) S. Allied to *G. longiflora*. Rootstock fleshy. L. oblong-lanceolate, stalked, nearly 2 ft. long, hairy beneath. Fl. in a cluster in the sheathing bases of the l., 1 in. across, white; the lip yellow with a red margin. Malaya.

Gaultheria nummularioides. (*G. C.* 1885, xxii. 456, 457. f. 84.) Ericaceæ. H. evergreen with wiry sub-prostrate stems, roundish deep green l. ciliate on the margins, and axillary urceolate rosy-pink fl. Himalaya.

Gazania bracteata. (*G. C.* 1894, xv. 620.) Compositæ. H. H. Allied to *G. longiscapa*. L. in a rosette, linear, 5–8 in. long. Peduncles 6 in. long. Fl.-heads 2 in. across; ray-florets white, purple beneath; disk yellow. [Syn. *G. nivea*, Hort.] Natal.

Geissois racemosa. (*Ill. H.* 1880, t. 385.) Saxifragaceæ. S. Shr. with opposite digitate l. Leaflets five, oblanceolate, acute, toothed. The stem, midribs, and young leaves purple-red. New Caledonia.

Genista andreana. (*R. H.* 1886, 372, t.) Leguminosæ, H. shr. Var. of *Cytisus scoparius*, with the wings of the fl. brown-crimson. [*Cytisus scoparius*, Link, var. *andreana*.] Normandy.

Genista oweniana. (*G. C.* 1889, v. 342.) G. A hybrid raised from *G. everestiana* and *G. elegans*.

Gentiana acaulis alba cæruleo-striata. (*Gfl.* t. 966.) Gentianaceæ. H. var. with dark blue stripes on the white petals.

—— Var. **albida.** (*Gfl.* t. 966.) H. A white-flowered variety.

—— Var. **azurea.** (*Gfl.* t. 966.) H. A var. with an intense blue flower.

—— Var. **cœlestina.** (*Gfl.* t. 966.) H. Fl. pale blue.

—— Var. **cærulea albomarginata.** (*Gfl.* t. 966.) H. Fl. white and light blue with dark blue streaks.

Gentiana arvernensis. (*Fl. and P.* 1882, 75.) H. alpine per., allied to *G. Pneumonanthe*, but more robust, with firmer broader l., and deeper blue fl.

Gentiana barbata. (*G. C.* 1890, viii. 503.) H. A slender species, 10-12 in. high, with opposite l. and erect blue fl. Allied to *G. Pneumonanthe*. Caucasus.

Gentiana Bigelovii. (*B. M.* t. 6874.) H. per. 12–16 in. high, with linear or linear-oblong l., 2 in. long, and axillary sessile violet fl., arranged in a leafy spike. Calyx-tube cylindric, purplish, with long linear green teeth. Corolla about 1 in. long, with ovate sub-acute lobes having two subulate teeth alternating with them. New Mexico.

Gentiana calycosa. (*Gfl.* t. 1270, f. a–c; *G. C.* 1888, iii. 563.) H. per., with erect unbranched stems, 4–6 in. high, bearing opposite subconnate ovate l. 1 in. long, and a solitary fl. about 1½ in. long, with spreading corolla-lobes, alternating with narrow bifid processes, deep blue dotted at the base of the lobes with white. California: Oregon.

Gentiana carpathica. (*Jard.* 1888, 113.) H. per.

Gentiana Charpentieri. (*Jard.* 1888, 76.) H. per., very similar to *G. lutea*, and supposed to be a hybrid between that species and *G. punctata*. The calyx is 5-toothed, and the corolla yellow, dotted with red. Switzerland.

Gentiana Clusii. (*W. G.* 1888, 180, 178, f. 36.) H. alpine per., something like *G. acaulis*. L. in a rosette, lanceolate, acute. Peduncle 1–2 in. high. Fl. solitary, large, dark blue, with short slightly spreading lobes. Calyx without folds between the lanceolate acuminate lobes. Switzerland.

Gentiana Fetisowi. (*Gfl.* t. 1069, f. 1–5.) H. A dwarf species, with a rosette of linear-lanceolate radical l., and an erect stem, with 1–2 pairs of shorter l., and a terminal compact cluster of campanulate deep blue fl., ¾ in. long. Turkestan.

Gentiana Frœlichii. (*Jard.* 1888, 125.) H. An acaulescent per., with a rosette of rather thick linear-oblong or linear-oblanceolate subacute l., and solitary large blue fl., on peduncles ¼–1½ in. long, with a pair of leaf-like bracts at the base of the acutely 5-toothed calyx. Carinthia.

Gentiana gaudiniana. (*Jard.* 1888, 76.) H. per., similar to *G. purpurea*, but usually more robust. Calyx entire, not spathaceous. Corolla of a somewhat lurid purple, with more pointed lobes than in *G. purpurea*. Supposed to be a natural hybrid between *G. punctata* and *G. purpurea*. Switzerland.

Gentiana Kesselringi. (*Gfl.* t. 1087, f. 3–4.) H. per., similar to *G. decumbens*, but with an equally 5-lobed calyx and whitish fl. dotted with violet lines. Turkestan.

Gentiana kochiana. (*W. G.* 1888, 181, f. 39.) H. alpine per. with elliptic obtuse radical l., and large solitary fl. on short peduncles, dark blue, marked with 5 blackish-green spots. Calyx with folds between the lobes. Corolla-lobes short, and scarcely spreading. [*G. acaulis*, Linn. var.] Alps.

Gentiana kummeriana. (*Jard.* 1888, 76.) H. A hybrid between *G. lutea* and *G. pannonica*. North Tyrol.

Gentiana Kurroo. (*B. M.* t. 6470: *Bull Cut.* 1880, 4.) H. per., about 6 in. high. L. linear-lanceolate, 2½–5 in. long, those on the ascending fl.-stems much smaller. Fl.-stems 1–4-flowered. Corolla 1 in. or more in diam., sky-blue, plentifully sprinkled with white around the mouth of the campanulate tube. Himalaya.

—— Var. **brevidens.** (*J. of H.* 1895, xxx. 3.) H. A var. with a dwarf spreading habit. Fl. blue, borne on prostrate stems 3–5 in. long. Himalaya.

Gentiana moorcroftiana. (*B. M.* t. 6727; *R. H.* 1884, 288.) H. Annual, something in the way of *G. campestris*. Stems branched, 4–10 in. high, leafy. L. oblong, acute. Fl. solitary or 3 together at the apex of the branches, blue, about ½ in. in diam.; throat naked, without scales: calyx-lobes nearly as long as the corolla. Himalaya.

Gentiana Olivieri compacta. (*Gfl.* t. 1069, f. 6–7.) H. per. This resembles *G. Fetisowi*, but has narrower l., and larger clusters of larger fl. Turkestan.

Gentiana oregana. (*Gard.* 1892, xlii. 214.) H. A stout erect species, 1–2 ft. high. L. ovate-oblong. Corolla broadly funnel-shaped, bright blue, allied to *G. affinis*. North America.

Gentiana ornata. (*B. M.* t. 6514.) H. per. alpine plant, 3–4 in. high, with small lanceolate acute l., and terminal solitary ventricose dark blue fl. Himalaya.

Gentiana prostrata. (*Jard.* 1888, 125.) H. annual, 1–3 in. high, with small elliptic l., and solitary blue fl. about ¼ in. in diam., calyx 5-toothed. North Temperate Regions.

Gentiana Saponaria alba. (*Ill.* t. 1016.) H. A var. with white fl.

Gentiana saxosa. (*Gard.* 1895, xlviii. 141.) H. H.? Species in the way of *G. acaulis*. Fl. white, borne in umbels of 4–5. New Zealand.

Gentiana septemfida cordifolia. (*B. M.* t. 6497.) H. This is the blue-flowered Gentian often cultivated under the name of *G gelida*. The true *G. gelida* has yellowish fl.

Gentiana Thomasii. (*Jard.* 1888, 76.) H. It is very similar to *G. lutea* in appearance, but the corolla has no folds, is purplish outside, and the tube is about equal to the lobes. [*G. rubra*, Clairv.] Switzerland.

Gentiana Walujewi. (*Ill.* t. 1140.) H. per., with lanceolate 5–7-nerved l., and an erect stem with numerous white fl. dotted with blue, arranged in a dense head. Corolla ¾ in. long, ½ in. in diam.; scales in the throat bifid. Turkestan.

Geodorum duperreanum. (*R. H.* 1882, 501.) Orchidaceæ. S. A pretty orchid, 8–12 in. high, with 3–4 oblong-lanceolate l., and a spike of 9–15 fl. Sep. and pet. linear-oblong, white; lip concave, white with purple veins. Cochin China.

Geonoma Carderi. (*Fl. and P.* 1876, 182; *Bull Cat.* 1876, 9.) Palmæ. S. palm with erect pinnate l.; petioles without spines, flat above, rounded and rough on the lower surface; pinnæ more or less confluent, rarely single, generally 3–5 together, forming pinnæ 1–2½ in. broad. [*Prestœa Carderi*, Hook. f. *B. M.* t. 7108.] Colombia.

Geonoma decora. (*Ill. H.* 1894, 361, t. 23.) S. A dwarf pinnate-leaved palm with reddish-brown l.-stalks and smooth deep-green narrow leaflets.

Geonoma Herbstii. (*Gard.* 1889, xxxv. 463.) S. Very similar to *G. gracilis*, but broader in the leaf-segments.

Geonoma intermedia. (*Williams' Cat.* 1882, 27.) S. palm, with light green pinnate l., having reddish-brown petioles.

Geonoma siesmayeriana. (*Lind. Cat.* 1896, 17.) S. Described as a species of tufted habit with glaucous green l. which are tinged with red when young.

Geonoma tenuifolia. (*Ill. H.* 1895, 186.) S. A palm with l. like those of *G. gracilis*, but glaucous, and the young foliage tinted with rose. Eastern Peru.

Geophila picta. (*K. B.* 1896, 18.) Rubiaceæ. S. A small prostrate plant with ovate-oblong l. 2 in. long, coloured dull green with a pink mid-rib and pink hairs. Fl. small, white, in many-flowered heads. British Guiana.

Geranium atlanticum. (*B. M.* t. 6452.) Geraniaceæ. H. herb. per., allied to *G. sylvaticum*, but with a woody tuberous rootstock. L. palmately 5–7 cleft, the segments very narrow and pinnatifid. Fl. purple veined with red, 1½ in. in diam. [*G. malvæflorum*, Boiss. & Reut.] Algeria.

Geranium sessiliflorum. (*G. C.* 1894, xv. 778.) H. A dwarf plant, with thick l. and almost sessile white and purple fl. New Zealand; Chile.

Geranium tuberosum Charlesii. (*B. M.* t. 6910: *R. H.* 1887, 167.) H. per., differing from the type in having a series of globose superimposed tubers, and in the segments of the l. being less lobed at their sides. Affghanistan.

Gerardia tenuifolia. (*Gn.* 1894, 48; *Ill. H.* 1894, 159.) Scrophulariaceæ. H. A perennial about 1½ ft. high with linear light green l. and pale violet *Pentstemon*-like fl. Mexico.

Gerbera Jamesoni. (*G. C.* 1889, v 772, f. 122; *B. M.* t. 7087; *Gard.* 1889, xxxvi. 340, t. 722.) Compositæ G. per. A beautiful Composite with a tuft of *Lactuca*-like l. and erect scapes bearing large heads of *Gazania*-like fl. 4 in. across, and coloured rich orange-scarlet. Natal.

Gerbera viridifolia. (*Gard.* 1896, xlix. 162.) H. H. Fl.-heads white, 1¾ in. wide, on scapes 1 ft. in height. L. inverted, lanceolate, with long stalks. South Africa.

Gerrardanthus tomentosus. (*B. M.* t. 6694.) Cucurbitaceæ. S. climber, with large cordate-reniform 5-lobed l., and axillary yellow fl. ½ in. in diam., the males in short racemes, the females one or two together. Fr. 3 in. long, obovoid, 10-ribbed, dry, opening by 3 valves, seeds with a broad wing at one end. Natal.

Geum elatum. (*B. M.* t. 6568.) Rosaceæ. H. herbaceous per., 1–2 ft. high, hairy. L. unequally pinnatisect; the segments roundish or oblong, irregularly toothed. Fl.-stem sparingly branched. Fl. golden yellow, 1 in. in diam. Himalaya.

Geum Heldreichii. (*J. of H.* 1896, xxxii. 487.) H. Apparently a var. of *G. coccineum*, Sibth. & Sm. with deep orange red flowers. Greece.

Geum rhæticum. (*Gfl.* t. 1229.) H. per., with hairy lyrate-pinnatisect green l.: peduncles 1-flowered, 6–8 in. high, with 2–3 reduced l., and a bright yellow fl. 1 in. or more in diam. Switzerland.

Gilia Brandegei. (*B. M.* t. 6378.) Polemoniaceæ. H. tufted herbaceous plant, covered with a glandular pubescence. L. mostly radical, pinnatisect; leaflets entire or bipartite, appearing as if in whorls of four, small, elliptic. Fl. in a terminal elongating raceme; corolla 1 in. long, pale yellow. Colorado.

Gilia tricolor violacea. (*Gfl.* t. 1042, f. 2.) H. A pretty var. with pale violet fl. with a dark eye.

Gingko biloba pyramidalis. (*W. G.* 1888, 214.) H. Coniferæ. Garden variety.

Githopsis specularioides. (*G. C.* 1894, xvi. 244, 245, f. 34.) Campanulaceæ. H. annual, in general appearance like the "Venus' looking-glass," but differing in the dehiscence of the capsule. Fl. blue. California.

Gladiolus Adlami. (*G. C.* 1889, v. 233.) Iridaceæ. H. H. A distinct species not unlike *G. cardinalis*, but with much smaller fl., coloured dull yellow, with minute red spots. Transvaal.

Gladiolus armeniacus. (*G. and F.* 1892, v. 318.) H. A dwarf species with numerous small deep purplish fl. Armenia.

Gladiolus atroviolaceus. (*Damm. Cat.* 1889, 4; *W. G.* 1889, 411.) H. plant, with short narrow l. striped bluish-green, and 7–12 large fl. with the three upper segments dark purple, almost black, and the lower ones purple or blue, with a white central stripe. Palestine.

Gladiolus aurantiacus rubrotinctus. (*G. C.* 1894, xvi. 152.) H. H. A var. with orange-yellow fl. thickly dotted all over with red. South Africa.

Gladiolus brachyandrus. (*B. M.* t. 6463.) H. H. species, about 1½ ft. high, with short firm strongly-ribbed l. about 3–4 in. long, and a lax spike of fl. of a pale scarlet with a pale tube. Perianth-segments all oblong, acute, three of them much smaller than the rest. South Tropical Africa.

Gladiolus decoratus. (*G. C.* 1890, viii. 211.) H. H. species, with l. 2 ft. long, spikes 3 ft. high, and fl. 3 in. long by 2 in. across, bright scarlet, with three yellow oblong blotches on the lower segments. East Africa.

Gladiolus Eckloni. (*B. M.* t. 6335.) H. H. corm. Rather dwarf. L. broadly ensiform. Fl. in a dense spike; corolla about 1½ in. diam., densely spotted with purple-red on a pale ground; throat green. South Africa.

Gladiolus Elloni. (*W. G.* 1890, 36.) H. H. A species with star-shaped white fl. tipped with purple. South Africa.

Gladiolus Kirkii. (*G. C.* 1890, viii. 524.) H. H. A species allied to *G. Eckloni*. L. ribbed, 1½ ft. high, spike 3 ft. high, many-flowered; fl. 1½ in. long, rose-coloured. Grahamstown.

Gladiolus kotschyanus. (*B. M.* t. 6897.) H. H. A slender species 1–2 ft. high, with linear l. 6–8 in. long, and a few-flowered lax spike of light violet fl. about 1½ in. long, with a nearly regular limb: the lower segments rather paler than the others, with a dark median stripe. Affghanistan: Persia.

Gladiolus Leichtlini. (*G. C.* 1889, vi. 154.) H. H. A fine plant, with the habit and stature of *G. Papilio* and colours of *G. psittacinus*. Transvaal.

Gladiolus Lemoinei. (*R. H.* 1879, 330.) H. H. A garden hybrid, between *G. purpureo-auratus* with *G. gandavensis*.

Gladiolus massiliensis. (*W. G.* 1894, 34.) H. H. A race of garden origin between *G. psittacinus* and *G. gandavensis*.

Gladiolus ochroleucus. (*B. M.* t. 6291.) H. H. L. flat, linear, distichous, 12–15 in. long and ½ in. broad, stem bearing a dense spike, 6 in. long, of pale yellowish fl. Spathe-valves ½–1 in. long, acute, green, with membranous edges and tips. Perianth 15–18 in. long, about 1 in. broad; tube curved, ½ in. long; segments oblong, the three upper broadest and arching, the three lower decurved. Transvaal.

Gladiolus oppositiflorus. (*G. C.* 1892, xii. 552; *B. M.* t. 7292.) H. H. An interesting plant supposed to be one of the parents of the *Gandavensis* race. Its spikes are 6 ft. high, and the fl. white with purple lines. It was in cultivation 50 years ago, and supposed to be from Madagascar. It has lately been found in the Transkei, South Africa.

Gladiolus Papilio atratus. (*Gfl.* 1885, 341.) H. H. A fine var. with a dark purple ground colour to the fl. instead of a yellow one.

Gladiolus Papilio × gandavensis. (*G. C.* 1893, xiii. 596.) H. H. A garden hybrid between the plants indicated by the name.

Gladiolus platyphyllus. (*G. C.* 1893, xiv. 456.) H. H. Not unlike *G. dracocephalus* in general characters, but with broader shorter opposite l., and a tall spike of deep yellow fl. veined with red. Natal.

Gladiolus primulinus. (*G. C.* 1890, viii. 122.) H. H. A robust broad-leaved species resembling *G. psittacinus*, but the fl. is a uniform pale primrose yellow, without any spots or streaks. East Africa.

Gladiolus punctatus. (*Damm. Cat.* 1889, 4.) H. H. L. 2–4, light green. Fl. 2–3, large, of a greenish-yellow, spotted with purple inside on the centre of the three upper segments, and outside striped and spotted with brownish-purple.

Gladiolus quartinianus. (*B. M.* t. 6739; *R. H.* 1884, 408.) H. H. Stems 3–4 ft. high. L. 1 ft. or more long, ½–¾ in. broad, rigid and strongly nerved. Fl. 4–6 in a lax spike, yellowish, flushed and spotted with scarlet, about 2 in. in diam. Tropical Africa.

Gladiolus turicensis. (*G. C.* 1889, vi. 183.) H. H. A hybrid raised from *G. gandavensis* and *G. Saundersii*.

Gladiolus Victorialis. (*W. G.* 1889, 309.) H. H. Garden hybrid between *G. communis* and *G. Colvillii*.

Gladiolus vinulus. (*W. G.* 1888, 326. 383.) G. A small-flowered species, with creamy-white fl., feathered with crimson. [*G. rittatus*, Hornem.] South Africa.

Gladiolus watsonioides. (*B. M.* t. 6919; *R. H.* 1887, 192.) H. H. L. 1–1½ ft. long, ½ in. broad; spike long, lax, bearing showy bright scarlet-red fl. 2 in. in diam. Mount Kilimanjaro.

Glaucium squamigerum. (*Gfl.* t. 972, f. 1.) Papaveraceæ. H. herb. with lyrate pinnatifid radical l., and a few minute sessile cauline ones. Fl. yellow, 1½ in. in diam.; capsule covered with scales. Altai Mountains.

Gleichenia dicarpa longipinnata. (*G. C.* 1879, xi. 780, f. 112.) Filices. G. evergreen fern, of free growth and with longer fronds than in the type. Fronds 2–3 times dichotomous, the branches furnished with numerous drooping pinnæ, 4–5 in. long, dark bluish green when young; under surface glaucous. Australia.

Gleichenia Mendelii. (*G. C.* 1879, xi. 780, described under *G. dicarpa longipinnata*.) G. evergreen fern, distinguished by the deep bluish green metallic colour of upper surface, and very glaucous under surface of the fronds. Australia.

Globba alba. (*B. H.* 1887, 286, t. 20.) Scitamineæ. S. [*G. albobracteata*, N. E. Br.]

Globba albo-bracteata. (*G. C.* 1882, xviii. 71; *Fl. and P.* 1882, 122.) S. per. Stems 2½ ft. high, with 7–8 ovate-lanceolate acuminate dark green l., purple-tinted beneath. Bracts and branches of the panicle white. Fl. yellow. Sumatra.

Globba atro-sanguinea. (*Veitch Cat.* 1882, 18, f. 10; *B. M.* t. 6626; *Fl. and P.* 1882, 89.) S. per. Stems numerous, 1–2 ft. high, bearing several lanceolate acuminate dark green l., edged with a lighter shade, and a short spike of yellow fl., with bright crimson bracts. Borneo.

Globba Schomburgkii. (*B. M.* t. 6298.) S. Glabrous, with tufted stems 6–12 in. high, bearing 3–5 l. of lanceolate acuminate form, 6–9 in. long, 1–1½ in. broad, green. Panicle pendulous, 2–4 in. long; lower half unbranched, bearing in each axil of the imbricating green bracts a globose tubercled bulbil. Fl. 1½ in. long, golden yellow with an orange-red spot at the base of the lip. The anthers, with a 2-partite wing on each side, are raised on long hooked filaments above the pet. giving the fl. a very peculiar look. Siam.

Gloriosa abyssinica. (*B. T. C.* 1894, 228; *W. G.* 1895, 284, f.) Liliaceæ. S. Smaller than *G. superba*, but with perianth-segments twice as broad as in that species. Abyssinia.

Glossopetalon meionandrum. (*Gtf.* 1894, 237, f. 52.) Celastraceæ. H. A compact much-branched small-leaved thorny shrub with inconspicuous whitish fl. Colorado, &c.

Gloxinia × Tapeinotes. (*W. G.* 1892, 305, t. 3.) Gesneraceæ. S. A hybrid between *Tapeinotes Caroline* and some spotted *Gloxinia*.

Gloxinia variabilis. (*R. H.* 1877, 70.) G. herb, with very large fl., white, spotted with violet-purple, the spots in middle part of the lobes densely crowded; inside of tube yellowish.

Glyphosperma Palmeri. (*B. M.* t. 6717: *R. H.* 1884, 288.) Liliaceæ. H. An *Anthericum*-like plant with linear channelled l., 12–18 in. long, and panicled racemes of starry white fl., ¾ in. in diam. Northern Mexico.

Glyptostrobus columnaris. (*R. H.* 1881, 528.) Coniferæ. H. tree. Garden var. [*Taxodium distichum*, Rich. var. *fastigiatum*, Hort.]

Gmelina Hystrix. (*B. M.* t. 7391: *G. C.* 1894, xv. 746.) Verbenaceæ. S. A climbing shr. with the habit of *Bougainvillea*; l. elliptic-oblong, entire or lobed; fl. in short dense terminal cone-like spikes formed of large red-purple bracts and irregularly campanulate yellow fl. 3 in. long. Philippine Islands.

Godetia pumila hybrida. (*W. G.* 1888, 436.) Onagraceæ. H. Of garden origin. [*Œnothera* sp.]

Gœthea makoyana. (*B. M.* t. 6427.) Malvaceæ. S. This is the plant better known as *Pavonia makoyana*.

Gomphia decora. (*R. H.* 1879, 311.) Ochnaceæ. S. free-flowering shr., with thick coriacous elliptic-oblong alternate l., and compact spicate bunches of golden yellow fl. Brazil.

Gomphocarpus sinaicus. (*W. G.* 1891, 448, f. 85.) Asclepiadaceæ. G. or H. H. This is a synonym of the common *G. fruticosus*. Syria to South Africa.

Gongora Charlesworthii. (*O. R.* i. 198.) Orchidaceæ. S. With the habit of *G. truncata*: l. plicate, 1 ft. long, 2½ in. broad: scape arching, 1½ ft. long, bearing about 20 fl., which are 2 in. wide, nearly white, barred with a very light brownish purple.

Gongora Charontis. (*G. C.* 1877, vii. 684.) S. Pseudobulbs large, rounded; l. large: spike hairy, many-flowered. Sep. and pet. yellow, spotted with brown. Lip white, its apex and basilar wings rich yellowish, spotted with crimson, as is the white column. Fl. half the size of those of *G. atropurpurea*. Colombia.

Gongora flaveola. (*G. C.* 1886, xxvi. 456.) S. Allied to *G. gratulabunda*, with an angular peduncle bearing a rich raceme of distant fl. of a light ochre-yellow spotted with brown. Lip with a sigmoid claw, a median arista and very small basilar horns on the middle part.

Gongora grossa. (*G. C.* 1877. vii, 781.) S. Closely allied to *G. atropurpurea*; differing from it in having bristles on the anterior horns outside, a tooth inside, and a small terete acuminate body between the horns: lip stouter; sep. much broader. The colour is whitish or yellowish with very numerous blackish-purple spots, the lip being so densely covered as to look nearly blackish-purple. Ecuador.

Gongora portentosa rosea. (*L.* xi. t. 508.) S. A form with sep. and pet. bright rose purple with small purplish spots; lip citron-yellow. Colombia.

Gongora sanderiana. (*G. C.* 1896, xx. 456.) S. Allied to *G. portentosa*. Pseudobulbs conical, 5 in. long. L. 10 in. long, 2 in. broad. Racemes 6-flowered; fl. yellowish with rose-coloured spots. Peru.

Gongora similis. (*G. C.* 1881, xvi. 812; *B. M.* t. 7224.) S. Nearly allied to *G. gratulabunda*.

Goniophlebium grandiceps. (*G. C.* 1886, xxv. 234; *Williams' Cat.* 1886, 25.) Filices. S. fern of dwarf habit, with simple oblong-lanceolate leathery fronds about 6 in. long, and 1 in. in breadth, tapering below into a narrow wing; they arise at intervals from a slender creeping rhizome. [*Polypodium* sp.] Formosa.

Gonioscypha eucomoides. (*G. C.* 1886, xxvi. 744; 1896, xx. 748, f.) Liliaceæ. S. per. with a short fleshy rootstock and a rosette of petiolate elliptic acute l., 1 ft. long by 4–5½ in. broad; scape bearing a dense spike of dull green fl., surmounted by a crown of fine subulate bracts, similar bracts being mixed with the fl. Bhotan.

Goodyera macrophylla. (*G. C.* 1880, xiv. 390.) Orchidaceæ. S. Terrestrial orchid with large l. and a spike of white fl. hairy outside. Madeira.

Goodyera Rollissoni. (*W. O. Gr. Man.* Ed. 6. 336.) S. L. velvety, dark-green, veined with yellow: under surface stained with purple-brown. [*Macodes Rollissoni*, Rolfe. Syn. *Anœctochilus Rollissoni*, Hort. and *Hæmaria Rollissoni*, Hort.] Malaya?

Goodyera rodigasiana. (*Ill. H.* 1886, t. 616: *G. C.* 1886, xxvi. 779.) S. terrestrial orchid, of dwarf robust habit, with thick ovate acute velvety green l., with a whitish-green central stripe. Fl. unknown. New Guinea.

Gordonia grandis. (*Ill. H.* 1880, 60.) Ternstrœmiaceæ. S. tree with l. somewhat like those of the Cherry-laurel, and few-flowered terminal corymbs of large white fl.

Gossypium Comesii. (*B. T. C.* 1889, 308, t. 10.) Malvaceæ. G.shr. A var. of Cotton with 3–5-lobed l., and yellow fl. with a blood-red spot at the base of the pet.

Govenia Andrieuxii. (*G. C.* 1884, xxii, 230.) Orchidaceæ. S. Resembling *G. capitata*, but with smaller yellowish fl., white at the base. The lip is cordate, oblong, acute, white with purple-red spots in front, yellow with brown bars above. Mexico.

Govenia deliciosa. (*G. C.* 1884, xxii. 230; *W. O. A.* t. 210.) S. Near *G. liliacea*, with fine white fl. marked with small purple bars inside; lip nearly elliptic, apiculate, with dark brown spots in front.

Govenia sulphurea. (*G. C.* 1885, xxiv. 70.) S. A curious species with onion-shaped pseudobulbs, lanceolate acuminate l. 2 in. broad, with blackish-purple midrib, and rather large fl. Sep. light sulphur-coloured: pet. white on the disc, sulphur on the margin, with transverse broken purple lines; lip white, with dark brown spots at the apex. Paraguay.

Graderia subintegra. (*G. C.* 1893, xiv. 798, f. 122.) Scrophulariaceæ. G. plant with woody rootstock, trailing branches, ovate acute hairy l., and erect racemes of *Gloxinia*-like rosy lilac fl. Probably semi-parasitic. South Africa.

Grammatophyllum elegans. (*G. C.* 1882, xviii. 776; *Fl. and P.* 1883, 10.) Orchidaceæ. S. Peduncle erect, several-flowered. Sep. oblong, obtuse, brown with light yellow margins; pet. smaller and narrower, of the same colour; lip pale ochre with brown margin, hairy on the disk. Polynesia.

Grammatophyllum Ellisii dayanum. (*G. C.* 1880, xiv. 326.) S. A var. without the transverse bars or lines which occur in the type. [*Grammangis Ellisii*, Reichb. f. var.] Madagascar.

Grammatophyllum Guilielmi-secundi. (*Gfl.* 1894, 114.) S. [*G. rumphianum*, Miq.] Borneo.

Grammatophyllum measuresianum. (*G. and F.* 1889, ii. 524.) S. A provisional name for a plant which is very similar to *G. fenzlianum*. It has stout fleshy pseudobulbs, large leathery green l., and stout erect scapes, 5 ft. or more high, with about 60 large fl. coloured yellow with dark brown blotches. [*G. rumphianum*, Miq.; *B. M.* t. 7507.] Philippine Islands.

Grammatophyllum multiflorum. (*Gard.* 1890, **xxxviii.** 93.) S. Fl. greenish, with brown blotches, and borne on a stout long raceme.

Grammatophyllum pantherinum. (*G. C.* 1878, ix. 788.) S. Allied to *G. Wallisii*, with rather smaller fl. spotted with dark blotches; sep. and pet. narrow; lip totally naked, without any lines of hairs or velvet; middle lobe acute. New Guinea.

Grammatophyllum rœmplerianum. (*G. C.* 1877, vii. 240.) S. Fl. rather large, strong and firm. Sep. oblong; pet. ovate; lip trifid; the side lobes broad, angled; the middle lobe protracted, narrower, emarginate, with two large lamellæ and a small one between them in front of the column, three smaller angular lamellæ before the end of the lip, all connected by raised lines. Madagascar.

Grammatophyllum sanderianum. (*G. C.* 1893, xiv. 15.) S. A clerical blunder, the plant intended being *G. speciosum*.

Graptophyllum picturatum. (*Bull Cut.* 1895, 7.) Acanthaceæ. S. A form of the well-known *G. pictum*, with larger l. than the type.

Gravesia guttata superba. (*Ill. H.* 1879, t. 359.) Melastomaceæ. S. per. This is the beautiful foliage plant known in gardens as *Bertolonia superbissima*.

Graya polygaloides. (*Späth Cat.* 1894–95.) Chenopodiaceæ. H. A bush with whitish twigs and dull green lanceolate l.; fruits rose-coloured. Western North America.

Greigia sphacelata. (*R. H.* 1880, 255. f. 52–53.) Bromeliaceæ. G. per. A robust plant, with arching l. 12–16 in. long, and short dense heads of brownish-red fl., slightly tinted with violet. The heads arise from the axils of the older outer l. and give the plant a curious aspect. Also called *Bromelia clandestina*. Chile.

Grevillea annulifera. (*G. C.* 1882, xviii. 134; *Fl. and P.* 1882, 140.) Proteaceæ. G. evergreen shr. with rigid pinnate l., bright green above, white beneath on each side of the mid-rib; segments narrow, linear, and pungent-pointed. Fl. milk-white, disposed in large panicled racemes. West Australia.

Grevillea ericifolia. (*B. M.* t. 6361.) G. A pretty shr. of dwarf habit, with alternate linear-acuminate l. 1 in. long, slightly hairy, and with revolute margins. Fl. in short terminal racemes; tube bright red, and the recurved limb greenish. East and South Australia.

Grevillea hookeriana. (*B. M.* t. 6879.) G. shr. with rigid pinnate l., having 3–9 pairs of linear segments. Racemes 2–3 in. long, one-sided, dense; fl. about ⅓ in. long, dull yellow, with long crimson styles. South-west Australia.

Grevillea thelemanniana splendens. (*R. H.* 1882, 456, t.) G. shr. with bipinnatifid rigid l., their segments linear, and short dense recurved spikes of crimson fl. larger than in the type. [Apparently *G. Wilsoni*, A. Cunn. var.] West Australia.

Grewia parviflora. (*G. and F.* 1888, 297: *Gft.* 1889, 601, f.) Tiliaceæ. H. shr of botanical interest, 2–3 ft. high, with large unequally serrate l., with three prominent veins, hispidulous above, whitish beneath. Fl. small, yellow, in dense pedunculate umbels, hidden by the l. North China.

Griffinia ornata. (*G. C.* 1876, v. 266; *Bull Cut.* 1876, 9; *B. M.* t. 6367.) Amaryllidaceæ. S. L. elliptic-oblong, convex, slightly decurrent at base; petiole narrowly winged. Scape compressed, two-edged, bearing an umbel of 20–24 long-stalked delicate purplish-lilac fl. Brazil.

Gundelia Tournefortii. (*R. H.* 1888, 53, f. 12; *G. and F.* 1888, 233.) Compositæ. H. H. per. A stout thistle-like plant, with pinnatifid spiny bright green l., veined with white; and globose spiny heads of small chocolate and yellow fl., surrounded by an involucre of leaf-like bracts. Asia Minor, &c.

Gunnera manicata. (*Ill. H.* 1884, t. 531.) Haloragidaceæ. H. H. per. with rough petioles, about 3 ft. long, and large roundish-cordate deeply-lobed l., 1½ ft. in diam. Brazil.

Gutierrezia Euthamiæ. (*M. D. G.* 1896, 26.) Compositæ. H. A suffruticose plant with linear l. and a profusion of small golden-yellow fl.-heads. Western United States.

Guzmannia bulliana. (*R. H.* 1886, 324.) Bromeliaceæ. S. [*Caraguata angustifolia*, Baker; *B. M.* t. 7137.]

Guzmannia devansayana. (*B. H.* 1883, 113, t. 8–9; *Fl. and P.* 1883. 139.) S. L. linear, canaliculate, 2 ft. long, dilated at their bases: scape stout, bracteate, about half as long as the l., with a dense ovoid spike, having broad shortly cuspidate red bracts, and small yellow fl. [*Caraguata devansayana*, E. Morr.] Ecuador.

Gymnadenia macrantha. (*Bull Cat.* 1886. 8.) Orchidaceæ. S. L. sheathing, 3-nerved; spike 6–10-flowered; fl. dark brown with a rounded purplish-lilac lip marked with darker streaks and speckles. Sierra Leone.

Gymnocladus chinensis. (*F. G.* 1889, 231: *Icones Plantarum*. t. 1412.) Leguminosæ. H. tree, with large bipinnate l., pinnæ with numerous oblong obtuse leaflets; fl. in short racemes and not showy: pods 3-4 in. long, very thick, containing a soft substance inside, used by the Chinese women for washing the face. Soap Tree. China.

Gymnogramme elegantissima. (*Bull Cat.* 1889, 8, f.: *H. G.* 1889, 513.) Filices S. fern, with bipinnate fronds, the pinules being cut into narrow segments. [*G. decomposita*, Baker.]

Gymnogramme fariniferum. (*Ill. H.* 1886, t. 604: *Cat. Comp. Cont. d'Hort.* 1886. 9.) S. Seedling var. of *G. schizophyllum*, with graceful arching fronds, pale green, powdered with white above, entirely white beneath.

Gymnogramme Heyderi. (*Fl. and P.* 1877, 252.) S. Intermediate between *G. chrysophylla* and *G. laucheana*.

Gymnogramme Lathamiæ. (*G. C.* 1884. xxii. 360.) S. A garden hybrid between *G. decomposita* and *G. schizophylla*.

Gymnogramme laucheana grandiceps. (*Fl. and P.* 1882, 90.) S. Golden Fern, with elongated bipinnate fronds, ending in a broadly tasselled drooping apex.

Gymnogramme Mertensii dobroydensis. (*Bull Cat.* 1877, 6.) G. Fronds rather short, triangular, densely clothed beneath and partially so on the upper surface, while young, with a golden powder.

Gymnogramme Pearcei robusta. (*G. and F.* 1888, 303; *Veitch Cat.* 1888. 11; *L'Hort. Int. Cat.* 1888–9. 50.) S. A robust form, with rather large triangular slightly cut pinnules, and the base of the stipes covered with a white powder. South America.

Gymnogramme schizophylla. (*Veitch Cat.* 1881, 7, 14; *Jard.* 1887, 30, f. 2.) S. Fronds crowded. Stipes and rhachides rather slender, reddish brown, 18–24 in. long, about 3 in. broad, gracefully arching, tripinnatifid, forked and proliferous at the apex; pinnules finely pinnatifid. Jamaica.

—— Var. **gloriosa.** (*Ill. H.* 1884, t. 522.) S. A form with larger and longer l. than in the type.

Gymnogramme Veitchii. (*G. C.* 1894, xvi. 446: *G. and F.* 1894, 433.) S. Supposed to be a hybrid between *G. decomposita* and *G. Pearcei robusta*.

Gymnostachyum decurrens. (*A. B.* 1894. 357.) Acanthaceæ. S. Stems short, branching: l. ovate, wavy, 4 in. long, coloured green and grey, with a purplish midrib: fl. in a spike 8 in. long, white, with a purple stalk. Pahang. Malay Peninsula.

Gymnotheca raddiana. (*Bull Cat.* 1878. 155.) Filices. S. fern with large purplish-brown rootstock, stout fleshy stipites, and ample bipinnate bright glossy-green fronds. Pinnæ lanceolate; pinnules linear, with their posterior base cordate, and their anterior base truncate; apex acuminate; margin sharply serrate. Brazil.

Gynandropsis coccinea. (*Ill. H.* 1878, t. 310.) Capparidaceæ. S. shr., 6–8 ft. high, quite glabrous. L. alternate, digitate: leaflets 3-5, lanceolate, cuspidate, green. Fl. scarlet, in a broad terminal raceme: ovary oblong, green, on a long stipe. Colombia.

Gynerium jubatum. (*R. H.* 1878, 449.) Gramineæ. H. H. grass much in the way of *G. argenteum*, but with broader flat deep green l., and larger and more graceful panicles of fl. [*Cortaderia jubata*, Stapf; *B. M.* t. 7607.] Ecuador.

Gynerium saccharoides. (*B. M.* t. 7352.) S. A tall grass. Stems 12 ft. or more high, 1 in. in diameter at the base, solid, clothed with distichous l. 5 ft. long by 1 in. wide. Panicle 5–6 ft. long, elegantly arched and not unlike the common Pampas Grass. The heads are largely used for the decoration of rooms and are known as "Uva Grass." Tropical America.

Gynura aurantiaca. (*Lind. Cat.* 1882, 1; *Ill. H.* 1881, t. 436; *Fl. and P.* 1882, 52.) Compositæ. G. per. herb, with erect stem, well furnished with large sublyrate toothed l.; the terminal lobe elliptic, acute. Fl.-heads orange, corymbose-paniculate. The stem, l., and involucres are covered with soft purple hairs, which give the plant a rich velvet-like appearance.

Gynura sarmentosa. (*B. M.* t. 7244.) S. A loose growing succulent herb with lanceolate l., reddish stems, branched above and bearing numerous heads of dull orange fl. Malaya.

Gypsophila cerastioides. (*B. M.* t. 6699.) Caryophyllaceæ. H. A pretty alpine plant resembling chickweed in habit and general appearance, but showy, with numerous white fl. striped with pink, ⅔ in. in diam. Himalaya.

Gypsophila raddeana. (*Regel, Descr.* 14: *Gfl.* t. 1365, f. 5–8.) H. per. of very dwarf cæspitose habit, with small crowded ovate-deltoid subacute l. and solitary pale rosy fl., striped with darker colour. Eastern Persia.

Habenaria carnea. (*G. and F.* 1891, 475, f. 76; *G. C.* 1891, x. 729, f. 105.) Orchidaceæ. S. A species with ovate l. spotted with grey, and an erect scape bearing 3–5 fl. of an uniform pale pink colour. Singapore.

—— Var. **nivosa.** (*O. R.* 1894, 290.) S. Differs from the type in having white instead of flesh-coloured fl. and unspotted l.

Habenaria cinnabarina. (*K. B.* 1893. 173.) S. A species of dwarf habit, with erect linear l. 6 in. long, and an erect spike 6 in. long, bearing a dense cluster of small orange-red fl. Madagascar.

Habenaria Elwesii. (*B. M.* t. 7478.) G. This species is most nearly allied to *H. digitata*, differing in the much larger fl., hairy pet. with much longer divisions, long lobes of the lip, and spur-like stigmatic processes. Nilgiri Hills.

Habenaria gigantea sumatrana. (*G. and F.* 1893. 336.) S. The variety is described as having large white fl. on erect scapes, with a large three-lobed labellum [*H. Susannæ*, R. Br. var.] Sumatra.

Habenaria intermedia. (*G. C.* 1879, xii. 136.) G. An interesting plant with a large spike of greenish-white fl., the bracts exceeding the fl. Sep. whitish green, the upper one white inside; pet. white; lip with a narrow white base, and a three-parted green blade, the lateral segments of which are beautifully fringed outside. Spur long, arched, compressed, greenish. Himalaya.

Habenaria longecalcarata. (*B. M.* t. 7228.) G. A tall species with plaintain-like radical l., and erect scapes, bearing a few fl., which are 1½ in. in diam., white, with a pendent spur 4 or 5 in. long. Western Ghats, India.

Habenaria macowaniana. (*G. C.* 1889, v. 168.) G. A small species, with small unattractive fl. [Syn. *Brachycorythis macowaniana*, Reichb. f.] South Africa.

Habenaria militaris. (*G. C.* 1886, xxvi. 518; *W. O. A.* t. 281.) S. terrestrial orchid, a foot or more in height, with linear acute l., 8–9 in. long, ½ in. broad, and a lax raceme of moderate-sized fl., with green sep. and pet. and a scarlet lip. The dorsal sep. has the pet. strongly adherent to it, forming a boat-shaped hood. The lateral sep. are oblong, acute, reflexed and revolute. Lip with spreading oblong-dolabriform side lobes, and a bifid front lobe with divergent triangular points. [*H. pusilla*, Reichb. f.] Cochin China.

Habenaria radiata. (*G. C.* 1880, xiv. 102.) G. or H. H. Sep. and spur light green. Pet and lip white, the latter fringed on the margin. Japan.

Haberlea rhodopensis. (*Gfl.* t. 991, f. 4; *B. M.* t. 6651.) Gesneraceæ. H. alpine, somewhat resembling *Ramondia pyrenaica*. L. all radical, obovate-elliptic, toothed, pubescent. Scape 2–3 in. high, 3-flowered. Fl. like those of *Streptocarpus*, pale blue with a dash of yellow at the throat. Balkan Mountains.

Habranthus punctatus. (*Gfl.* t. 1163, f. 3.) Amaryllidaceæ. G. Flowering before the l.; scape 1-flowered: perianth 1½ in. long, funnel-shaped, white, spotted with red. [*Hippeastrum.*] Chile.

Habrothamnus carminatus ruber. (*Gfl.* 1886, 426.) Solanaceæ. G. An effective form, with more numerous and more brilliantly coloured fl. than var. *elegans.* [*Cestrum.*]

Habrothamnus Newellii. (*Veitch Cat.* 1877, 23.) G. Very free-flowering, bearing dense terminal clusters of bright crimson fl., larger and more brilliant than in the common varieties.

Hæmadictyum marginatum. (*B. H.* 1885, 260.) Filices. G. Fronds pinnate, 6 ft. or more long, the pinnules opposite, oblong, ending in a distinct point, 14–15 in. long by 4 in. broad; petioles yellowish.

Hæmanthus abyssinicus. (*Bull Cat.* 1887, 10.) Amaryllidaceæ. S. bulb., with ovate-lanceolate wavy l., and large umbels of rich salmon-pink fl. [*H. multiflorus*, Martyn.] Abyssinia.

Hæmanthus albomaculatus. (*G. C.* 1878, x. 202.) G. bulb, with the facies of *H. coccineus.* L. two, contemporary with the fl., ligulate, fleshy, glabrous. 1 ft. long, 2½–3 in. broad, deep green, spotted with white. Scape lateral. green; fl. in a dense head, 2–3 in. in diam., white. South Africa.

Hæmanthus Arnottii. (*G. C.* 1879, x. 492.) G. bulb, in the way of *H. albiflos*, with two spreading round-oblong l. 4–5 in. long, 3–4 in. broad, dull green, glabrous except near the edge which is softly hairy. Scape 3–4 in. long, green tinged with purple, unspotted, rather compressed. Bracts 6, overtopping the white fl., oblong, whitish with green veining. Pedicels ½–¾ in. long; perianth ⅝ in. long; segments a little longer than the tube. Colesberg District. South Africa.

Hæmanthus Baurii. (*B. M.* t. 6875.) G. A very distinct dwarf species, with two large sub-orbicular dark green l.: ciliated at the edge, 5–6 in. long and broad, spreading on the ground. Umbel subsessile between the l.; bracts broadly obovate, white, ciliate; fl. a little shorter than the bracts, white. Kaffraria.

Hæmanthus candidus. (*Bull Cat.* 1894. 3.) G. Habit of *H. coccineus*, having large heads of pure white fl. on scapes 9 in. long. [*H. Allisoni*, Baker.] Transvaal.

Hæmanthus cinnabarinus. (*Veitch Cat.* 1878. 23: *B. M.* t. 5314.) S. bulb, with a robust scape 1 ft. high, covered with a large dense globose head of vivid cinnabar-scarlet fl., tinted here and there with carmine. West Coast of Africa.

Hæmanthus Clarkei. (*G. C.* 1894, xvi. 498.) G. A garden hybrid between *H. albiflos* and *H. coccineus.*

Hæmanthus hirsutus. (*G. C.* 1878, ix. 756.) G. bulb, with two sub-erect round-oblong l. contemporary with the fl., very obtuse, shortly hairy on both sides, dark green above, paler beneath. Scape compressed, lateral, stout, a little longer than the l., densely hairy, greenish in the upper, reddish in the lower part. Fl. white, in a dense head, 4 in. in diam. Bracts 6–8, pale red, spreading, 1 in. long, membranous. Transvaal.

Hæmanthus Kalbreyeri. (*G. C.* 1878, x. 202.) S. bulb, with leaf-stem 6 in. long, greenish, blotched with claret, bearing 2–3 oblong l., 9–10 in. long, 2½–3 in. broad, developed after the fl. Scape lateral, tall, crowned by an umbel of 30–40 bright crimson fl. [*H. multiflorus*, Martyn.] Isles de Los, Sierra Leone.

Hæmanthus Lindeni. (*G. C.* 1890, viii. 436, f. 85; *Ill. H.* 1891, t. 112.) S. Allied to *H. angolensis*, but with very much larger fl. and different l. Scape 1½ ft. high, with a large head of about a hundred fl., each 2 in. in diam., colour rosy-scarlet. Congo.

Hæmanthus Mannii. (*B. M.* t. 6364; *Bull Cat.* 1878, 7, t. 4; *Fl. and P.* 1878, 119.) S. bulb, flowering before the l. appear, very showy. L. shortly petioled, elliptic, shortly acuminate, narrowed into the petiole at base. Scape 1 ft. high, terete, stout, mottled with green and claret-colour. Umbel many-flowered: pedicels 1 in. long, purple-red: ovary green; perianth and stamens bright crimson-scarlet. West Tropical Africa.

Hæmanthus rupestris. (*Veitch Cat.* 1878, 29.) S. bulb of the *H. coccineus* type, with bright red fl. produced in a dense head on a scape 6–8 in. long, mottled with purple. Tropical Africa.

Hæmaria Otletæ. (*Ill. H.* 1891, t. 124.) Orchidaceæ. S. A beautiful *Anœctochilus*-like plant 6–10 in. high. with lanceolate acute l., of a dark olive-green veined with copper colour. The fl. are arranged in a lax spike, white with a yellow tinted one-sided lip. Tongking.

Hakea laurina. (*G. C.* 1885, xxiii. 149, f. 30; *B. M.* t. 7127.) Proteaceæ. G. A handsome shr. with stalked lanceolate acute rigid l., and axillary globose heads, 2 in. diam., of delicate rosy-lilac fl. Australia.

Halesia tetraptera Meehani. (*G. and F.* 1892, 534, f. 91.) Styracaceæ. H. A seeding var. of *H. tetraptera*, differing from the type in its distinctly rugose thicker pale l. and shorter-stalked smaller-sized fl.

Halimodendron argenteum, flore purpureo. (*Späth Cat.* 1894–95.) Leguminosæ. H. A form differing from the type in its deep rosy purple fl.

Halimodendron speciosum. (*R. H.* 1875, 30.) H. tree differing from the common form of *H. argenteum* in its larger and longer-petioled l., and deeply coloured fl. [A form of *H. argenteum*, DC.] Siberia?

Hamamelis japonica. (*B. M.* t. 6659.) Hamamelidaceæ. H. shr. or small tree, very similar to *H. virginica*, but differing in having rather larger fl., with dull purple revolute calyx lobes and short fruiting calyx. [This is *H. arborea*, Mast., *G. C.* 1881, xv. 205, f. 38.] Japan.

Hapaline Brownii. (*B. M.* t. 7325.) Araceæ. S. Habit of a *Spathicarpa*, from which it differs mainly in having the spadix free from the spathe; it has green cordate l. and a greenish white infl. Malayan Peninsula.

Haplocarpha Leichtlinii. (*G. C.* 1883, xix. 78.) Compositæ. H. H. herb. per., showy and free-flowering. L. 6–12 in. long, 2–2½ in. broad, lyrate-pinnatisect, bright green, and at first cobwebbed above, densely white-tomentose beneath. Scape as long as the l., white-tomentose. Fl.-heads 2–2¼ in. in diam., yellow. South Africa.

Haplopappus spinulosus. (*B. M.* t. 6302.) Compositæ. H. per. shr., very floriferous and showy, much-branched, 1–2 ft. high, canescent. L. 1 in. long, pinnatisect or bipinnatisect; the lobes linear, aristate. Fl.-heads corymbose, 1 in. in diam., radiate, bright yellow. [*Aplopappus spinulosus*, *DC.*] Rocky Mountains.

Hardenbergia makoyana. (*R. H.* 1882, 344. f. 44.) Leguminosæ. G. climber. This is supposed to be a hybrid, but it is merely the narrow-leaved state of *H. comptoniana*.

Harpalium rigidum semiplenum. (*G. C.* 1888, iv. 417.) Compositæ. H. herb. per. A var. with two, three, or more rows of ray florets. Garden origin. [*Helianthus rigidus*, Desf. var.]

Hartwegia Gemma. (*G. C.* 1878, x. 8.) Orchidaceæ. S. Of *Pleurothallis*-like aspect, with blackish-violet stems, thick semi-terete channelled acute l., blotched with blackish-violet, and a small 1-branched infl. of brilliant amethyst-purple flowers.

Haworthia distincta. (*G. C.* 1876, vi. 130.) Liliaceæ. G. per. of dwarf habit. L. in a lax rosette, attenuate from base to a subaristate point, 2½–3 in. long, dull green, tesselated by means of pale greenish-white veins. Fl. in a slender raceme, greenish-white with dark green stripes. South Africa.

Haworthia xiphiophylla. (*B. M.* t. 7505.) G. This differs from *H. setata* by its narrower thinner l., and from *H. arachnoidea* by the l. not being at all pellucid or lineate. Cape Colony.

Hebeclinium panamense. (*B. H.* 1877, 330.) Compositæ. G. villose shr. L. opposite, large, elliptic-ovate, acute, coarsely toothed. Fl.-heads lilac-rose, small, very numerous, in large dense trichotomous terminal cymes. [*Eupatorium ianthinum*, Hemsl. var.] Panama.

Hebenstretia comosa serratifolia. (*Gn.* 1890, 191, f. 46; *B. T. C.* 1890, 82.) Selaginaceæ. H. H. A species with lanceolate serrate l., and dense spikes of white fl. marked with a blood-red spot. South Africa.

Hebenstretia tenuifolia. (*G. C.* 1887, ii. 398, under *Dimorphotheca fruticosa*.) H. annual, 1 ft. or more high with linear entire or slightly toothed l., and long spikes of small white fl. marked with different shades of orange in the throat. South Africa.

Hechtia cordylinoides. (*B. M.* t. 6554.) Bromeliaceæ. S. bromeliad much like *H. Ghiesbreghtii* and *H. argentea* in habit and l., but with an elongated paniculate infl. Fl. very small, white. [*H. stenopetala*, Klotzsch.] Mexico.

Hedera Helix aurantiaca. (*R. H.* 1884, 84, f. 20, t.) Araliaceæ. H. An ornamental var. with orange-red fruit.

—— Var. **tessellata.** (*Gard.* 1893, xliv. 150.) H. A distinctly marked form of the common Ivy, with veinings after the manner of the variegated Japanese Honeysuckle.

Hedræanthus niveus. (*W. G.* 1893, 288, f. 63.) Campanulaceæ. H. A dwarf plant with grassy l.; stem and bracts purple; calyx reddish; corolla snow-white. [*Wahlenbergia.*] Alps of Bosnia.

Hedychium Elwesii. (*G. C.* 1894, xvi. 152.) Scitamineæ. S. A near ally of *H. coronarium*, but with larger bracts and rich golden yellow fl. Himalaya.

Hedychium peregrinum. (*G. C.* 1883, xix. 368.) S. per. 3–4 ft. high, with adpressed-hairy elliptic lanceolate acuminate l., and a softly hairy fl.-spike of white fl., the pet being very narrow, linear, spathulate, yellowish-green. Madagascar.

Hedychium wilkeanum. (*G. C.* 1894, xvi. 276.) S. A garden hybrid between *H. coronarium* and *H. gardnerianum*.

Hedysarum Mackenzii. (*B. M.* t. 6386.) Leguminosæ. H. herb., with pinnate l. 4–6 in. long; leaflets 5–7 pairs and one odd one, oval, obtuse, or retuse. Fl. rose-purple, in a long lax raceme. Pods 1–2 in. long, composed of 4–7 round flattened reticulated glabrous joints. North America.

Hedysarum microcalyx. (*B. M.* t. 6931.) H. per., leafy, nearly glabrous. L. pinnate, 6–12 in. long, with 17–21 oblong obtuse leaflets. Racemes 6–10 in. long, on very long peduncles, many-flowered; fl. ¾ in. long bright purple. North-west Himalaya.

Hedysarum multijugum. (*Gfl.* t. 1122.) H. shrubby per. 2–5 ft. high, with pinnate l.; the leaflets 20–40, alternate, obovate or oblong, obtuse, silky beneath. Racemes axillary, longer than the l., with 8–10 pink fl. South Mongolia.

Helenium Bolanderi. (*R. H.* 1891, 377, f. 93–94.) Compositæ. H. per. of vigorous habit and very free-flowering, 1½–2 ft. high, with lanceolate acute l. and solitary heads of fl. about 2 in. in diam., the ray bright yellow, the disk dark brown. North America.

Heliamphora nutans. (*B. M.* t. 7091.) Sarraceniaceæ. G. A remarkable plant, with pitcher-like l. as in *Sarracenia*, and an erect 3–5-flowered scape; the fl. with four to six ovate acuminate white pet. and a cluster of yellow stamens, suggesting *Ranunculus*. British Guiana.

Helianthus cucumerifolius. (*H. H.* 1882, 120.) Compositæ. H. annual, with triangular-ovate waxy coarsely-toothed l., subcordate at base, and large radiate yellow fl.-heads. [*H. debilis*, Nutt.; *B. M.* t. 7432.]

Helianthus Dammanni sulphureus. (*Damm. Cat.* 1890–91, 57.) H. Garden hybrid between *H. argyrophyllus* and *H. annuus*.

Helianthus lenticularis. (*Gfl.* 1894, 104, f. 25.) H. Said to attain a height of 12 ft. in rich ground. Fl.-heads yellow, of medium size.

Helianthus mollis cordatus. (*G. and F.* 1889, 136, f. 100.) H. per. Stems 3–5 ft. high, leafy, branching; l. broadly ovate, acute; fl. large, orange-yellow, on long leafy peduncles. Western Georgia and Texas.

Helianthus petiolaris. (*R. H.* 1879, 99.) H. Coarse-growing annual, with cordate attenuate l., and large bright yellow radiate fl.-heads. North America.

Helichrysum devium. (*G. C.* 1888, iv. 62.) Compositæ. G. shr. 2–3 ft. high, bushy, with snow-white tomentose branches. L. lanceolate, sessile, 3-nerved, greyish-green, with white wavy borders. Peduncles white. Cymes of several fl.-heads, with opaque white involucres and black disks. Madeira.

Helichrysum frigidum. (*B. M.* t. 6515.) H. A beautiful little Alpine plant, with decumbent branches clothed with small silky-hairy l., each branch terminating in a silvery-white head of fl., about ½ in. in diam. Corsica.

Helichrysum graveolens. (*Gfl.* t. 889, f. 1.) H. herb, densely woolly-white, with short creeping barren shoots and erect densely leafy flowering stems. L. of the barren shoots linear-ligulate, obtuse, attenuate at base: stem-l. linear, acute, base broader, sessile. Corymbs compact, 2 in. or more across. Fl.-heads yellow, on very short peduncles. South-west Europe.

Helichrysum plicatum. (*Gfl.* t. 889, f. 2.) H. per. dwarf. L. oblanceolate, obtuse, attenuate towards the base, green, laxly cobwebbed. Fl.-heads yellow, in rather lax corymbs; corymbs 1½–2 in. across. Greece; Asia Minor.

Heliconia aureo-striata. (*Ill. H.* 1882, t. 464.) Scitamineæ. S. Foliage plant, with ovate acuminate dark green l., with yellow midrib and veins: petioles, and often the margins of the l. purplish. [Not a *Heliconia.*] Solomon Isles.

Heliconia choconiana. (*G. and F.* 1888, 161–2, f. 31: *R. H.* 1888, 290.) S. per. 3–4 ft. high, quite glabrous. L. sessile on the sheaths, 6–10 in. long, 2 in. broad, oblong-lanceolate, acuminate, shining green. Infl. sessile, terminal, deflexed. Spathes scarlet, 2 in. long. Fl. yellowish, as long as the spathes. Guatemala.

Heliconia illustris. (*G. C.* 1893, xiii. 413; *R. H. B.* 1895, 68, f.) S. A beautiful foliage plant with *Musa*-like habit; the l. coloured rose-red with the veins clearly marked in rose-pink. [Not a *Heliconia.*] South Sea Islands.

—— Var. **rubricaulis.** (*Sand. Cat.* 1895, 33.) S. Differs from the type in having more richly coloured l., and the sheathing bases of the l.-stalks coloured vermilion-red. [Not a *Heliconia.*]

Heliconia metallica. (*B. M.* t. 5315.) S. form, with distichous broadly lanceolate l., with the margins, veins, under surface and petioles bronzy-red. [Not a *Heliconia.*] Polynesia.

Heliconia nitens. (*Bull Cat.* 1883, 14.) S. per. A small neat species, with obliquely oblong-ovate bright satiny-green l. Mexico.

Heliconia spectabilis. (*Ill. H.* 1892, t. 156.) S. per. L. green with a red midrib, and dull purple beneath. Tropical America.

Heliconia triumphans. (*Ill. H.* 1882, t. 448; *Lind. Cat.* 1882, 6.) S. A foliage plant somewhat like *Maranta zebrina*, with elliptic oblong petiolate l. of a deep green with dark brown stripes following the course of the primary veins. [Not a *Heliconia.*] Sumatra.

Heliconia viridis. (*Williams' Cat.* 1883, 27.) S. per. with fine foliage, and graceful habit. L. 1½–2 ft. long by 6 in. broad, pale green. [Not a *Heliconia.*] Polynesia.

Helicophyllum Alberti. (*B. M.* t. 6969; *G. C.* 1887, ii. 754.) Araceæ. H. per. An *Arum*-like plant, with hastate l., having two long linear basal lobes with an occasional side lobe standing erect in front of the blade. Peduncle very short. Spathe 6 in. long, oblong, acute, the tube inside and out and the back of the limb pale green, the limb inside being rich brown-purple. Central Asia.

Helicteres Isora. (*G. C.* 1887, ii. 366.) Sterculiaceæ. S. shr. with large roundish crenate-dentate cuspidate l. somewhat unequally cordate at the base, tomentose beneath, and small axillary clusters of deep red fl. Fr. twisted. India.

Heliophila scandens. (*G. C.* 1887, i. 252.) Cruciferæ. G. An interesting climbing Crucifer, with slender twining stems, lanceolate l., and racemes of large white fl. sometimes tinted with rose. Natal.

Heliotropium incanum glabrum. (*Bull Cat.* 1885, f. 14; *G. C.* 1884, xxii. 808, 809, f. 140.) Boraginaceæ. G. per. L. broadly elliptic, rough: fl. purple in a dense globose infl. Peru.

Helleborus caucasicus nigricans. (*Gfl.* 1896, 162.) Ranunculaceæ. H. A form differing from the type in its large bluish-black fl.

Heloniopsis umbellata. (*G. C.* 1887, i. 711.) Liliaceæ. H. per. of interesting character, with a rosette of lanceolate light green l., brownish towards the tips, and a few-flowered raceme of rose-coloured fl., having narrow free segments. Formosa.

Hemerocallis aurantiaca major. (*G. C.* 1895, xviii. 62, f. 80; *Gard.* 1895, xlviii. 400, t. 1041.) Liliaceæ. H. A variety with large bright orange-red fl., which are produced in autumn; l. 1½ in. wide, and strongly ribbed. Japan.

Hemerocallis fulva longituba. (*Gn.* t. 1187.) H. A var. with orange-yellow fl., having the slender tubular portion half as long as the segments. [*H. fulva*, Linn. var. *augustifolia*, Baker.] Japan.

Hemigraphis colorata. (*Bull Cat.* 1885, 14.) Acanthaceæ. S. Foliage plant of dwarf branching habit, with cordate crenate bullate l., tinted with silvery-grey on the upper surface, purple beneath; fl. small, white, and axillary. India.

Hemiorchis burmanica. (*B. M.* t. 7120.) Scitamineæ. S. A quick growing herbaceous plant with thin rhizomes, oblong green l., and short erect scapes of purple and yellow fl. each ¾ in. across. Himalaya.

Hemipilia calophylla. (*B. M.* t. 6920.) Orchidaceæ. S. terrestrial orchid. with a solitary oblong or elliptic acute l. of a dark green, beautifully mottled with purple-brown, and a lax raceme of moderate-sized fl. Sep. ovate, acute, white, with green midline. Pet. smaller, white. Lip oblong, slightly lobed, ½ in. long, rich purple. Tenasserim.

Hemitelia guianensis Paradæ. (*Ill. H.* 1877, t. 280.) Filices. S. tree-fern, differing from the type in its more robust habit, larger glabrous bipinnate fronds: the rhachis without wings, marked with white lenticels; sori marginal copious. Colombia.

Hemitelia Lindeni. (*G. C.* 1894, xv. 663.) S. Stem not 2 in. in circumference, and nearly 2 ft. high: fronds large, handsome. Brazil?

Heptapleurum polybotryum. (*B. M.* t. 6238.) Araliaceæ. S. The correct name for the plant cultivated as *Paratropia teysmanniana*. Java.

Heptapleurum venulosum erythrostachys. (*B. M.* t. 7402.) S. A small tree with spreading branches and digitate long-stalked l.; fl. red, minute, very numerous, on a branched terminal panicle. Tropical Asia.

Heracleum flavescens. (*Jard.* 1889, 155, f.) Umbelliferæ. H. per. A less vigorous species than *H. pubescens* or *H. persicum*, but more ornamental on account of its more abundant and more divided foliage. Northern Asia, &c.

Heracleum persicum. (*F. G.* 1888, 273.) H. per. A gigantic species growing 12–13 ft. high, with large umbels of white fl. Persia.

Hermannia cristata. (*B. M.* t. 7173.) Sterculiaceæ. G. shr. A dwarf plant with a woody rootstock, thin wiry stems, lanceolate toothed l., and drooping axillary fl. ¾ in. long, coloured orange-red. Transvaal.

Hesperaloe yuccæfolia. (*G. C.* 1882, xviii. 199, f. 34; *Fl. and P.* 1882, 140.) Liliaceæ. G. per. A remarkable plant of *Yucca*-like habit, with a rosette of linear channelled dry l. 12–18 in. long, with thready margins, and a nearly naked fl.-stem 3–4 ft. high, bearing several loose racemes of fascicled reddish fl. Texas, &c.

Hesperantha longituba. (*G. C.* 1877, vii. 652.) Iridaceæ. G. bulb, with 2–3 distichous glabrous grass-like l. 6–9 in. long, and a reduced one clasping the scape below the middle. Scape 1 ft. high with a lax spike of 3–8 erect fl. Spathe-valves entire, green, tinged with red. Perianth-tube usually longer than the spathe; segments of the limb ½–⅝ in. long, oblong, inner ones white, outer ones tinged with reddish-brown. South Africa.

Hesperocallis undulata. (*Fl. and P.* 1882, 26.) Liliaceæ. H. H. L. lanceolate, wavy, broadly edged with white. Fl. white, in loose racemes, fragrant. California.

Hesperochiron pumilus. (*Gn.* 1888, 32.) Hydrophyllaceæ. H. alpine per. with tuberous rootstock. L. all radical 2–2¼ in. long, ½–¾ in. broad, spathulate, hairy beneath. Scapes naked, 1-flowered; fl. nearly rotate, white, veined with violet and with a yellow base, the lobes longer than the tube, which is hairy within. Idaho to Oregon.

Heterospathe elata. (*Bull Cat.* 1880, 5; *B. T. O.* 1882, t. 2.) Palmæ. S. A graceful pinnate-leaved Palm. Java.

Heterostalis huegeliana. (*G. C.* 1879, xii. 70.) Araceæ. G. or S. An *Arum*-like plant with tuberous rootstock bearing 1–2 l. contemporary with fl. L. very variable in form, sagittate, hastate, or 5-lobed with the basal lobes directed upwards. Spathe erect 4–7 in. long; limb 2½ times as long as tube, oblong-lanceolate, acuminate, rich velvety purple-brown inside, reticulated at base and apex

with pale green. Spadix shorter than spathe. Ovaries purple with white stigmas, 1-celled, separated from the anthers by a long interval covered with deflexed points: immediately above ovaries is a circle of pale clavate ascending neuter organs. Appendix 2–2½ in. long, blackish. [*Typhonium diversifolium*, Wall.] Himalaya.

Heuchera rosea. (*M. G. Z.* 1893, 2.) Saxifragaceæ. H. A garden hybrid between *H. pilosissima* and *H. sanguinea*.

Heuchera sanguinea. (*B. M.* t. 6929.) H. per. herb. L. on long hairy petioles, cordate-orbicular, shortly lobed, and coarsely crenate. Fl.-stem 12–18 in. high, with a paniculate infl. of drooping bright crimson campanulate fl. ⅓ in. in diam. New Mexico and Arizona.

—— Var. **alba.** (*Ill. H.* 1896, 334, f. 32.) H. A form differing from the type in having pure white fl.

Hexisea bidentata. (*G. C.* 1887, ii. 431.) Orchidaceæ. S. A pretty little Orchid, with jointed stems, constricted at the nodes, the joints 1-1½ in. long. L. linear-oblong, not longer than the joints. Fl. in short racemes, arising from the nodes, bright scarlet, about ½ in. in diam.; sep. and pet. linear, acute; lip narrow, obovate-oblong. Panama, Colombia.

Hibiscus Archeri. (*G. and F.* 1896, 324.) Malvaceæ. S. A garden hybrid between *H. Rosa-sinensis* and *H. schizopetalus*.

Hibiscus Baptistii. (*Williams' Cat.* 1880, 15.) S. shr., with brilliant crimson-scarlet double fl. Polynesia.

Hibiscus brilliantissimus. (*Bull Cat.* 1876, 9.) S. A var. of *H. Rosa-sinensis*, with large single fl. of the richest and most brilliant crimson-scarlet flushed with orange.

Hibiscus californicus. (*W. G.* 1891, 484.) G. shr. 5–6 ft. high, something in the way of *H. palustris*, with large white fl. 5–5½ in. in diam., purple in the centre. California.

Hibiscus calycinus. (*G. C.* 1891, x. 462.) G. shr. The correct name of the plant introduced and distributed a few years ago under the name of *H. chrysanthus*. Natal.

Hibiscus chrysanthus. (*Bull Cat.* 1884, 13.) G. A free-growing shrubby plant. L. subtrilobate, serrated: fl. large, yellow with a purple-crimson eye. [*H. calycinus*, Willd.] Natal.

Hibiscus cisplatanus. (*G. C.* 1887, ii. 366; *B. H.* 1898, 480, f.) G. shr., with ovate acuminate l., with a tendency to become 3-lobed, and pale rosy-lilac fl. 2½ in. in diam., with a campanulate calyx surrounded by numerous linear bracts. Brazil.

Hibiscus coccineus. (*G. C.* 1887, ii. 366.) This is the oldest name for the plant often named *H. speciosus*.

Hibiscus Collerii. (*F. M.* t. 214.) S. Fl. large, double, yellow, with the base of some of the pet. deep red. Polynesia. [*H. Rosa-sinensis*, Linn. var. *Collerii*.]

Hibiscus crassinervis flammeus. (*Gfl.* 1893, 494; *B. T. O.* 1895.) G. A dwarf showy annual (per. when grown under glass) with small heart-shaped glandular l. and long-stalked fiery red fl. Abyssinia.

Hibiscus esculentus speciosus. (*Gfl.* 1894, 622, f. 111.) H. annual with large sulphur-yellow fl. blotched with blood red at the base of the pet.

Hibiscus insignis. (*Gfl.* t. 868.) S. shrub, shortly and densely hairy. L. cordate, more or less trilobed, crenate-dentate, on long petioles. Involucre very short, 8-toothed. Calyx-lobes lanceolate, erect. Corolla 3 in. in diam., yellowish, suffused with rose colour towards the tips, with a deep-red ring just above the base.

Hibiscus lasiocarpus. (*G. and F.* 1888, 425, f. 68.) G. or H. H. shr. very similar to *H. Moschentos*, with broadly ovate l. more or less cordate at the base, nearly equally tomentose on both sides. Bracts of the involucre ciliate. Fl. as in *H. Moschentos*. Capsule more or less densely hairy. [The form figured at the above place is the var. *occidentalis*, Gray, from Mexico and California, which differs in having the l. more uniformly cordate at the base, and the capsule pubescent rather than hirsute.] North America.

Hibiscus Lebelei. (*R. H.* 1893, 449.) H. H. An unbranched species 3 ft. to 4½ ft. high, with palmate l. and large

fl. lemon yellow with red-brown blotches at the base of the corolla. China.

Hibiscus micranthus roseus. (*B. T. O.* 1895, 20, f. 3.) A var. with handsome rose-coloured fl. Abyssinia.

Hibiscus Rosa-sinensis fulgens. (*Gard.* 1888, xxxiii. t. 634.) Garden variety.

—— Var. **intermedius.** (*Bull Cat.* 1889. 8. f.) S. A. garden hybrid between *H. Rosa-sinensis magnificus* and *H. schizopetalus.*

—— Var. **magnificus.** (*Bull Cat.* 1882. 16.) S. A handsome var. with large rosy-magenta fl. shaded with crimson, and with a dark chocolate spot at the base of each pet.

Hibiscus roseus. (*R. H.* 1879, 10, t.) G. shr., with ovate-lanceolate acuminate toothed l., and very large deep rose fl. A species allied to *H. militaris* and *H. Moscheutos.*

Hibiscus subviolaceus. (*R. H.* 1884, 517.) S. A var. of *H. Rosa-sinensis,* with fine double fl. of a bright rose colour, lightly striped with violet, and dark purple at the base of the divisions.

Hibiscus surattensis. (*G. C.* 1891. ix. 529, f. 105.) S. A scandent species. with palmately lobed l. and cupped fl., 2 in. across. yellow with a crimson eye. The curiously formed involucre gives this species a special interest. Tropics.

Hibiscus venustus. (*B. M.* t. 7183 ; *Gfl.* 1891, 440.) S. A handsome tall shr., with lobed orbicular l. 18 in. in diam., and creamy-yellow fl. 3 in. across. Its nearest ally is *H. mutabilis.* Tahiti?

Hibiscus zebrinus. (*Bull Cat.* 1879, 6.) S. A distinct and handsome var. of *H. Rosa-sinensis.* with double fl., of a creamy yellow, variously striped and flaked with scarlet.

Hillebrandia sandwicensis. (*B. M.* t. 6953 ; *G. C.* 1887, i. 804 ; ii. 341.) Begoniaceæ. S. herb of interesting character, with the habit and appearance of a *Begonia.* L. large, roundish, many lobed, deeply cordate at base, serrate, hairy, dark green. Peduncles 6–12 in. long, forked at the top. bearing compact cymes of white fl. ¾ in. in diam., with five sep. and five small spathulate petals. Sandwich Islands.

Hippeastrum andreanum. (*G. C.* 1880. xiv. 424.) Amaryllidaceæ. G. bulb, with lorate l. produced before the fl. Peduncle 1 ft. long, slightly two-edged. Umbel 4–6-flowered ; spathe-valves red, 1½–2 in. long ; pedicels 1–1½ in. long, each subtended by a long membranous bract. Perianth 3–4 in. long ; tube very short, not crowned at the throat ; segments oblanceolate-oblong, acute, ½–¾ in. broad, pale red with bright red streaks. Stamens 1–1½ in. shorter than the perianth-segments. Colombia.

Hippeastrum brachyandrum. (*G. C.* 1890, viii, 154 ; *Gfl.* 1890, 478 : *B. M.* t. 7344.) G. It has large fl. of very beautiful colour beginning as a pale pink, and ending as a deep blackish red at the base of the segments. South Brazil.

Hippeastrum equestre splendens. (*R. H.* 1895, 577, t. ; *G. M.* 1895, 264.) S. A var. differing from the type in the broader segments and larger size of the fl., &c.

Hippeastrum muesserianum. (*Ill. H.* 1896, t. 72.) S. Segments narrow, salmon-colour tinted with rose. Apparently nearly allied to *H. aulicum.* Brazil.

Hippeastrum Wolteri. (*Gfl.* 1895, 201, f. 49, t. 1418.) S. A var. of the well-known *H. equestre.* Costa Rica.

Hohenbergia ferruginea. (*R. H.* 1881, 437, f. 104.) Bromeliaceæ. S. A large robust species, with spreading broad ligulate obtuse denticulate l., of a bright green, irregularly spotted with dull green. Infl. paniculate : fl. glomerulate, small, rosy-lilac. [*Æchmea augusta*, Baker.]

Holothrix lindleyana. (*G. C.* 1888, iii. 364, f. 55, 56.) Orchidaceæ. G. A pretty little terrestrial Orchid, with 2 or 3 ovate radical l. spreading on the ground, and a slender scape bearing a raceme of small white fl. The lip is 5-lobed, with an inrolled spur. South Africa.

Homalomena insignis. (*Ill. H.* 1885, t. 560.) Araceæ. S. foliage plant with elliptic-oblong l. 10–12 in. long, 5–6 in. broad, bright green above.

suffused with purple beneath ; petioles and midrib purplish. Scapes numerous, purplish. Spathes green, ovoid, with a compressed beak. Borneo.

Homalomena peltata. (*G. C.* 1877, vii. 273, f. 45, 46.) S. per. of tufted habit. Petioles 2½ ft. long, sheathing at base, clothed with soft rusty-brown hairs, with numerous conical prickles near the base : leaf-blade about 2 ft. long and 16–17 in. wide, cordate-ovate, acuminate, peltate, rather coriaceous, dark green and glabrous above, clothed with a soft rusty pubescence beneath. Peduncle 6–9 in. long, sub-compressed, setose, marked with purplish blotches. Spathe 6–7 in. long, open half way down, acuminate, keeled at back, glabrous, pinkish, white-spotted ; inside greenish, shining. Spadix shorter than the spathe, ½–¾ in. thick, upper ⅔ covered with cream-coloured male fl., the base with greenish female fl. mixed with abortive female fl., and the intervening space with neuter fl. Colombia.

Homalomena siesmayeriana. (*Cat. Comp. Cont. d'Hort.* 1885, 6.) S. L. slightly sagittate, on long glabrous green petioles. [Syn. *Homalonema siesmayerianum.*]

Homalopetalum jamaicense. (*O. R.* 1896, 204 ; *Icones Plantarum*, t. 2461.) Orchidaceæ. S. A genus allied to *Tetramicra*, remarkable in having the median pet. (lip) like the lateral pet. It is of dwarf habit : the rhizomes creeping : pseudobulbs ¼ in. long ; l. ovate, ½ in. long ; peduncle 1 in. long, bearing 1 fl. with linear segments ½ in. long. Jamaica.

Honckenya ficifolia. (*G. C.* 1894, xvi. 498.) Tiliaceæ. S. A shrub with the habit of *Spermannia*, palmately lobed l. and purple fl. 4 in. across, borne in short terminal racemes. West Tropical Africa.

Hoodia Bainii. (*B. M.* t. 6348.) Asclepiadaceæ. G. succulent. Quite glabrous, dwarf and bushy. Stems 1½ in. thick, many-angled ; angles composed of confluent spine-tipped tubercles, greyish green. Fl. near the apex of the branches, 2½ in. in diam., cup-shaped, pale buff with a reddish tinge. South Africa.

Hoplophytum lineatum. (*G. C.* 1893, xiii. 412.) Bromeliaceæ. S. L. in cylindric tufts, green with stripes of white ; the marginal spines black. [*Echmea.*] Brazil.

Hoteia japonica, foliis purpureis. (*R. H.* 1885, 366.) Saxifragaceæ. H. var. with purplish stems and foliage. [*Astilbe japonica*, A. Gray, var.]

Houlletia Landsbergi. (*B. M.* t. 7362.) Orchidaceæ. S. First described in 1855, but only lately re-introduced. Pseudobulbs 1 in. long : l. 12 in. by 4 in., strongly ribbed : peduncle 4 in. long, stout, purplish : fl. large, fleshy, 3 in. across : sep. oblong, orange, with red spots ; pet. smaller and notched : lip narrow, with four horn-like lobes, white tinged with purple. Costa Rica.

Houlletia odoratissima xanthina. (*G. C.* 1884, xxii. 38.) S. A handsome form with orange-yellow fl., the lip being sulphur and white.

Howea belmoreana. (*B. M.* t. 7018 : *G. C.* 1888, iv. 415.) Palmæ. S. This is the plant known as *Kentia belmoreana*. Lord Howe's Island.

Hoya globulosa. (*G. C.* 1882, xvii. 741, f. 115 ; *F. M.* t. 406.) Asclepiadaceæ. S. Profuse-flowering climber, with fleshy oblong acute l., and large globose heads of pale straw-coloured fl., with white coronal processes and brownish-pink interspaces. India.

Hoya gonoloboides. (*Gfl.* 1884, 26.) S. plant with climbing fulvous-hispid stem, membranous cordate ovate acuminate l., hairy on both sides, hispid peduncles and an umbel of rotate brownish fl. with ovate obtuse lobes, hairy on both sides. India (?).

Hoya Griffithii. (*G. C.* 1885, xxiv. 334, 337, f. 74 ; *B. M.* t. 6877.) S. A fine species with oblong l. 3½–6 in. long, ¾–1¼ in. broad, acuminate at the apex. Peduncles stout, 2 in. long ; pedicels stout, 1½ in. long. Calyx-segments large, green : corolla 1½ in. in diam., cream-coloured, tinted with red : corona waxy white ; the segments elliptic in outline as seen from above. Himalaya.

Hoya lasiantha. (*G. C.* 1882, xviii. 333, f. 57 ; *B. M.* t. 5081.) S. climber. This is the name now adopted for the plant known as *Placostemma lasiantha*.

Hoya Lauterbachii. (*M. K.* 1896, 9, f.) S. A large-flowered species with hairy stems, l. and fl. ; the latter are dark brown-red inside, emerald green outside. New Guinea.

Hoya linearis sikkimensis. (*B. M.* t. 6682 : *G. C.* 1883, xx. 8, f. 1 : *Fl. and P.* 1883, 93.) S. per. Stems very weak and flaccid, pendulous, slender, softly hairy, as are also the soft fleshy terete l., which hang rather close to the stems ; fl. in terminal 10–13-flowered umbels, waxy white, pentagonally 5-lobed, nearly ½ in. in diam. Sikkim.

Hoya longifolia Shepherdi. (*G. C.* 1885, xxiv. 616, f. 140.) S. A beautiful plant with linear-oblanceolate acute l. 5–7 in. long, ½ in. broad, and globose umbels of pale flesh-coloured fl. ½ in. in diam. Sikkim.

Huernia brevirostris. (*G. C.* 1877, vii. 780, f. 124 ; *B. M.* t. 6379.) Asclepiadaceæ. G. Succulent of very dwarf habit. Stems rather stouter than in most species, 4-angled. Fl. 4–6 together, perfectly glabrous ; pedicels 4–6 lines long. Corolla 1¼ in. in diameter, campanulate, with spreading 5-lobed limb : lobes deltoid-acuminate, minutely papillate, pale yellow, thickly marked with small blood-red spots : tube pinkish-white, similarly spotted, except at the bottom, which is entirely blood-red, smooth and shining. Outer corona velvet-black, 5-lobed ; lobes spreading, bifid at apex. Rostra of inner corona with very short apices, about half a line long, purplish. South Africa.

Huernia Hystrix. (*G. C.* 1876, v. 795.) G. or S. A reference to its proper genus of the plant known as *Stapelia Hystrix*.

Huernia macrocarpa. (*W. G.* 1892, 350, f. 58 ; *Gfl.* 1892, 526, f. 108.) G. or S. [*H. Penzigii*, N. E. Br.]

Huernia macrocarpa. (*Gfl.* t. 1416.) G. A *Stapelia*-like plant with shortly bell-shaped greenish-yellow fl. spotted with red. Abyssinia.

Huernia oculata. (*B. M.* t. 6658.) G. Of dwarf habit, with stout glabrous erect 5-angled strongly toothed stems, and campanulate acutely 5-lobed fl., 1 in. in diam., intense blackish-purple, with the bottom of the corolla white. Damaraland.

Huernia Penzigii. (*G. C.* 1892, xi. 719.) G. or S. A species with stems 3 in. high, five-angled, with teeth nearly ½ in. long. Fl. in sessile cymes, 1 in. wide, campanulate, black-purple. [Syn. *H. macrocarpa*, Damm., not Schweinf.] Abyssinia.

Huernia Sprengeri. (*W. G.* 1893, 143, f. 30 ; *Gfl.* 1897, 275, f.) G. A species with gold-bronze star-shaped white-centred fl. Abyssinia.

Humulus japonicus. (*Gfl.* 1886, 188, 359, ff. 43, 360.) Urticaceæ. H. climber, somewhat like the common Hop, but the bracts of the female fl. not enlarging in fr. L. palmately 5–7-lobed, toothed on the margins. Male fl. in long lax panicles. Female fl. in short ovoid spikes on long peduncles : bracts cordate, cuspidate-acuminate. Japan.

—— Var. **lutescens.** (*B. T. O.* 1895, 207.) H. This differs from the type in having the l. bronzy or gold-tinted.

Hyacinthus azureus. (*B. M.* t. 6822.) Liliaceæ. H. An interesting species, much resembling a *Muscari* in general appearance, but having a campanulate corolla. L. six or eight to a bulb, erect, 4–6 in. long, channelled down the face. Fl. sky-blue, in a short dense conical spike. [Syn. *Muscari azureum*, Fenzl.] Asia Minor.

Hyacinthus fastigiatus. (*B. M.* t. 6663.) H. A pretty little spring-flowering bulb, much resembling *Scilla verna*, but readily distinguished by having the perianth-segments united at the base. L. linear, semi-terete ; fl. bright purple, in a small lax raceme. Corsica ; Sardinia.

Hyacinthus lineatus. (*Gfl.* 1887, 446, f. 114.) H. spring-flowering bulb, with two oblong-lanceolate acute l., 2–2½ in. long, ⅓–½ in. broad, and a scape 2–4 in. high, with a short raceme of ascending small campanulate blue fl. Asia Minor.

Hydnophytum longiflorum. (*B. M.* t. 7343.) Rubiaceæ. S. Remarkable ant-harbouring plant, the base of the stem being swollen and tuber-like, and chambered as if hollowed out by maggots. The stems proper in this species are terete with opposite ovate fleshy green l. and axillary clusters of white sessile tubular fl. ½ in. long. Fiji.

Hydnophytum Forbesii. (*B. M.* t. 7218.) S. Closely allied to *H. formicarium*, but the swollen part of the stem is echinate. Fl. long, tubular, white ; fr. red, egg-shaped. New Guinea.

Hydrangea aspera. (*Gn.* 1889. 461.) Saxifragaceæ. H. shr. resembling *H. paniculata* in habit, with lanceolate ovate or almost obovate l., acuminate at apex, wavy and serrate at the margin, beneath grey-green, and thickly covered with hairs. Barren fl. large, numerous, white. Pekin.

Hydrangea involucrata. (*R. H.* 1875, 59.) H. H. shrub, about 18 in. high, with very rough red stems. L. opposite, 6 in. long by 2 in. broad, ovate-lanceolate, coarsely toothed, villose, rugose above, glaucous below; infl. umbellate, with an involucre of four large cuspidate bracts. Sterile fl white; female fl. pale blue. Japan.

Hydrangea japonica tricolor. (*Fl. and P.* 1882, 106.) H. shr. with the l. handsomely variegated with white and pale green, and edged with yellow. [*H. Hortensia*, DC. var.]

Hydrangea petiolaris. (*B. M.* t. 6788.) H. A free-growing scrambling species, with petiolate cordate acute toothed l., and large terminal corymbs of fl., the perfect ones being pale green, having their pet. united, and falling off in the shape of an extinguisher; the barren fl. white, 1 in. or more in diam. This plant is sometimes cultivated as *Schizophragma hydrangeoides*. Japan.

Hydrangea ramulo-coccinea. (*H. G.* 1890, 246, 407.) G. shr. with the young shoots and petioles dark plum-red, and the peduncles translucent red. Fl. large and tinted with rose.

Hydrangea stellata rubra plena. (*G. C.* 1890, vii. 165.) H. A double flowered form of *H. Hortensia*.

Hydroglossum scandens Fulcheri. (*G. C.* 1882, xvii. 399, 331, f. 47; *Fl. and P.* 1882, 59, ff.) Filices. S. A handsome climbing fern, differing from the type (generally known as *Lygodictyon Forsteri*) in its larger pinnæ 3 in. long, and nearly 1 in. broad, more tapering to the acute apex, with truncate or cuneate-truncate bases. [*Lygodium scandens*, Sw. var. *Fulcheri*.] Polynesia.

Hydrosme leopoldiana. (*G. C.* 1887, i. 642, 644–45, f. 122-123: *Ill. H.* 1887, t. 23.) Araceæ. S. tuberous-rooted Aroid with a solitary l.; petiole 2 ft. high, green, dotted with purple at the base, bearing a horizontally spreading 3-branched blade, the branches being 2–3 times pinnatisect with narrow lanceolate acuminate segments. Spathe vase-shaped at the base, prolonged into a broadly lanceolate wavy limb, velvety purple-brown. Spadix 2 ft. long, cylindric, tapering, only the basal 3–4 in. bearing flowers, the rest naked and smooth. [*Amorphophallus.*] Congo.

Hydrosme Teuszii. (*Gn.* t. 1142.) S. Aroid with the habit of a *Dracontium*. L. solitary, tripartite, with bipinnatifid branches, the ultimate segments of which are linear-lanceolate. The peduncle is very short; spathe 6 in. long, with a short ovoid tube and an open trifid limb; the outside of the spathe is green, the inside dark purple-brown. Spadix a little shorter than the spathe, with a greenish cylindric appendix. [*Amorphophallus Eichleri*, Hook. f.; *B. M.* t. 7091.] West Tropical Africa.

Hymenocallis concinna. (*G. C.* 1893, xiv. 150.) Amaryllidaceæ. S. Resembling *H. caribæa*, but evergreen and smaller in all its parts; l. 1 in. wide. fl. white. Mexico.

Hymenocallis Deleuilii. (*R. H.* 1894, 218.) S. A vigorous plant with scape 2½ ft. in height, bearing an umbel of from 12 to 20 fl. [*H. littoralis*, Salisb.] Cochin China.

Hymenocallis eucharidifolia. (*G. C.* 1884, xxi. 700.) S. L. thin, bright green, contemporary with the fl.; blade nearly sessile, oblong, 1 ft. long, 3-3½ in. broad. Scape two-edged, 1 ft. long, with an umbel of 4–5 sessile white fl. Perianth with a slender green tube, 4 in. long, linear segments 3-3½ in. long, and a funnel-shaped corona 1¼ in. long, with two cusps between each pair of filaments.

Hymenocallis humilis. (*G. and F.* 1888, 114, f. 23.) S. A small species, with a few short linear l., and a solitary fl. about 3 in. in expanse, with very narrow linear greenish segments, and a white corona. Florida.

Hymenocallis macrostephana. (*B. M.* t. 6436; *G. C.* 1879, xi. 430.) G. L. several, contemporary with fl., oblanceolate, 2-3 ft. long, 3–4 in. broad. Scape shorter than l., 2-edged; umbel 6–10-flowered; fl. pure white, tube 3½ in. long; perianth-lobes as long as tube, linear, spreading; corona funnel-shaped, 2–2½ in. across, margin toothed; stamens inflexed.

Hymenocallis Palmeri. (*G. and F.* 1888, 138, f. 25.) S. Similar to *H. humilis*, but with a smaller bulb, longer l., and larger fl., with narrower and longer white segments. Florida.

Hymenosporum flavum. (*Bull Cat.* 1884, 13.) Pittosporaceæ. G. evergreen per. of branching habit, with glabrous broadly obovate lanceolate l., and a terminal corymb of yellow fl. marked with orange-red at the mouth of the tube, and hairy outside. Eastern Australia.

Hypericum Buckleyi. (*G. and F.* 1891, iv. 581, f. 91.) Hypericaceæ. A dwarf shr., with solitary terminal bright yellow fl. 1 in. across. North Carolina.

Hypericum densiflorum. (*G. and F.* iii. 524, f. 67.) H. A species nearly allied to *H. prolificum*, but with narrower l. and smaller fl. United States.

Hypericum moserianum. (*Jard.* 1888, 209; *W. G.* 1888, 470; *R. H.* 1889. 464. t.) H. garden hybrid between *H. calycinum* and *H. patulum*.

—— Var. **tricolor.** (*Jard.* 1894, 186, f. 93.) H. This has l. variegated with white and rosy-carmine.

Hypocyrta pulchra. (*G. C.* 1894. xvi. 244.) S. species with stout hairy stems, hairy fleshy elliptic-ovate l. 5 in. long, and solitary axillary fl., 1 in. long, hairy and coloured orange-yellow. Colombia.

Hypoestes aristata. (*B. M.* t. 6224.) Acanthaceæ. G. or S. per. herb. Stems square, 2–3 ft. high, branched, pubescent. Fl. in axillary whorls, forming terminal spikes: corolla 1 in. long, 2-lipped, entirely rose-purple outside, inside white, spotted and striped with rose-purple: upper lip trifid; tube slender: throat yellow. South Africa.

Hypolytrum latifolium. (*B. M.* t. 6282.) Cyperaceæ. S. per. Culms 2–4 ft. high, stout, obtusely 3-angled. L. longer than the culm, about 1 in. broad, 3-nerved and closely striated, plaited; margins minutely serrulate. Infl. a rather close bracteate panicle of cylindric-oblong brown spikelets, which are about ¼ in. long: entire panicle 3–4 in. long and broad. Ceylon: India.

Hypolytrum schraderianum. (*G. C.* 1893, xiii. 414.) S. A stout grass-like plant with tufted l. 2½ ft. long and 2 in. wide, entire, green with purple margins. Brazil.

Hypoxis Arnottii. (*G. C.* 1877, viii. 552.) Amaryllidaceæ. G. per., with a globose tuber 3–4 in. in diam., covered above with stiff erect fibres. L. 5 or 6, clasping each other and the scapes for about 2 in. at the base, 1 ft. long, 3–4 lines broad, erect, falcate, coriaceous, clothed with sparse soft spreading white hairs. Scapes 2 to a tuft, 6 in. long, densely pilose. Fl. 6–8 in a raceme, lax below, dense above; limb ⅜ in. long, bright yellow inside, green and pilose outside. Colesberg, South Africa.

Hypoxis Baurii. (*G. C.* 1877, viii. 584.) G. tuber of dwarf tufted habit. Tubers small, annual. L. 5–6 in a tuft, linear, densely hairy, about 2 in. long: scapes slender, 1-flowered: perianth ½ in. long, glabrous, bright red. Caffraria.

Hypoxis colchicifolia. (*G. C.* 1884, xxii. 649.) G. A distinct species with oblong-lanceolate glabrous l. 6–8 in. long, 1½–2 in. broad, bright green above, rather glaucous beneath. Peduncles slightly hairy, bearing three or four bright yellow fl. South Africa.

Iberis contracta rosea. (*Gfl.* 1888, 399.) Cruciferæ. H. per. with rose-coloured fl.

Iberis stylosa. (*Gfl.* t. 1029. f. 3.) H. A dwarf tufted floriferous plant. L. alternate, lanceolate, 1½ in. long. Fl. corymbose, pale lilac. [*Noccea stylosa*, Reichb.] South Europe.

Icacina Mannii. (*B. M.* t. 6260.) Olacaceæ. S. shr. with large tuberous root, and slender climbing stems. L. alternate, 5–7 in. long, elliptic, acute, entire, glabrous, green. Fl. in small dense axillary fascicles; corolla about ¼ in. long, pale yellow. Old Calabar.

Idesia polycarpa crispa. (*R. H.* 1888, 463, f. 112.) Bixaceæ. H. Garden variety.

Idria columnaria. (*Bull Mus. Paris*, 1896, i. 113.) Tamaricaceæ. G. A curious plant with thick pyramidal spiny stems and terminal panicles of straw-coloured fl. Lower California.

Ilex camelliæfolia. (*R. H.* 1887, 234.) Ilicaceæ. H. shr. A garden var. of the common Holly.

Ilex conocarpa. (*B. M.* t. 7310.) G. A shrub about 6 ft. high with lanceolate serrulate l. 4 in. long, and short axillary racemes of small white fl. Interesting as being one of the plants which yield "Mate" or "Paraguay tea." Brazil.

Ilex Fischeri. (*R. H.* 1887, 53.) A garden var. of the common Holly.

Ilex insignis. (*G. C.* 1889. xiv. 296, f. 53.) G. A small tree or shr., with dark green lanceolate-oblong strongly dentate-lobed l., with spine-tipped lobes. Himalaya.

Ilex monticola. (*Nat. Arb. Zösch.* 1891, 15.) H. shr. with elliptic acuminate l., acute at the base, finely serrate, and rather thin in texture; berries solitary, axillary, red. Eastern United States.

Illicium verum. (*B. M.* t. 7005; *G. C.* 1888, iv. 15; *G. and F.* 1888, 299.) Magnoliaceæ. G. shr. of economic value (the true Star Anise). L. lanceolate or oblanceolate, obtusely acuminate, glabrous. Fl. axillary, globose, on pedicels ½ in. long: outer segments green, inner purple. China.

Imantophyllum atrosanguineum. (*Williams' Cat.* 1888, 20, spelled *Himantophyllum.*) Amaryllidaceæ. S. A garden variety of *Clivia miniata*, Regel.

Imantophyllum blandfordiæflorum striatum. (*Bull Cat.* 1889, 8.) S. bulb, with l. striated with creamy-yellow, and dense heads of *Blandfordia*-like fl., crimson-carmine outside, the segments margined with salmon-buff.

Imantophyllum maximum. (*R. H.* 1881, 140.) S. A fine form of *Clivia miniata*, with a large compact spherical head of brilliant orange-red fl.

Imantophyllum miniatum aurantiacum. (*Williams' Cat.* 1886, 25.) S. var. with large trusses of bright yellowish-salmon coloured fl., 3 in. in diam. [*Clivia miniata*, Regel. var.]

—— Var. **cruentum.** (*Williams' Cat.* 1884, 13, f. 7.) S. or G. form with large many-flowered umbels of large bright orange-coloured fl.

Imantophyllum miniatum splendens. (*R. H.* 1875, 70.) S. A form with deep orange flowers, more robust and rather larger than the type.

Imantophyllum Van-Houttei. (*R. H.* 1880, 300.) G. Garden hybrid.

Impatiens amphorata. (*B. M.* t. 6550.) Geraniaceæ. H. In the way of *I. Roylei* (*I. glanduligera*), and equally floriferous, with large lanceolate serrate l., and laxly racemose purple fl., much like those of *I. Roylei*, but with a rather longer spur. Western Himalaya.

Impatiens auricoma. (*Jard.* 1893, 52; *B. M.* t. 7381.) S. Plant glabrous, about 2 ft. high with a fleshy stem and opposite lanceolate l., the stalks of which bear stalked glands on their upper portions. Fl. bright yellow with a short bifid curved spur. Comoro Islands.

Impatiens comorensis. (*Ill. H.* 1887, 62; *R. H.* 1887, 434.) S. Balsam of vigorous growth, with elliptic-lanceolate acute crenate l. and large bright carmine fl., having a bifid white spur. Comoro Islands.

Impatiens cuspidata. (*Bull Cat.* 1884, 13.) S. Stems glaucous; l. lanceolate, acuminate, serrate; fl. solitary, axillary, rose, with a long filiform spur. Burma.

Impatiens Episcopi. (*Veitch Cat.* 1886, 12.) S. Perpetual-flowering Balsam, with fl. of a rich purple-carmine, shot with a brilliant rosy hue. [*I. Sultani*, Hook f. var.] Zanzibar.

Impatiens flaccida albiflora. (*Ill. H.* 1884, t. 519.) S. The correct name for the pretty Balsam known as *I. platypetala alba*.

Impatiens Hawkeri. (*G. C.* 1886, xxv. 760, 761, f. 168; *Bull Cat.* 1886, 8, f.) S. Balsam, with whorls of elliptic acuminate serrate l., and very large flat fl. of a rich carmine. Spur about 2 in. long. The fl. are solitary in each leaf-axil. South Sea Islands.

Impatiens Marianæ. (*G. C.* 1881, xv. 688.) G. annual with thickish hairy stems, cuneate-oblong acute serrate l. of a deep green with light areas between the veins, and cymes of rather

large purple fl. Lip with a longish slender hooked spur. Standard with a hairy ridge extending into a blunt or acute projection at about ⅓ below the top. Assam.

Impatiens Micholitzi. (*W. G.* 1892. 342.) S. A dwarf bushy species with white or rosy fl. having a deep rose-coloured eye. New Guinea.

Impatiens mirabilis. (*B. M.* t. 7195.) S. Stem erect, naked, attaining 4 ft. in height and 9 lines in thickness. L. nearly 1 ft. long, fleshy, green; fl. curiously inflated, golden yellow. Langkawi Island, Malacca Straits.

Impatiens Rodigasi. (*Ill. H.* 1889, t. 78.) S. Balsam with opposite or whorled ovate-lanceolate acute serrate l., and axillary rosy-purple fl. on long pedicels, having a long slender spur curved forward. Java.

Impatiens Sultani. (*B. M.* t. 6643; *Fl. and P.* 1882, 106.) S. Balsam of bushy habit, with stalked ovate-lanceolate acuminate l., and large flat long-spurred brilliant carmine fl., solitary or in pairs. Zanzibar.

Incarvillea compacta. (*Gfl.* t. 1368.) Bignoniaceæ. H. An acaulescent herb. per. with pinnate l. and a cluster of large subsessile somewhat funnel-shaped rosy-purple fl. springing from the crown. Tangut, North-west China.

Incarvillea Delavayi. (*R. H.* 1893, 544; *Jard.* 1893, 58, f. 20: *B. M.* t. 7462.) H.H. A nearly stemless herb with pinnatipartite l. and a raceme of red or deep rose-coloured fl. China.

Incarvillea Koopmanni. (*G. C.* 1880, xiv. 725; *B. M.* t. 6593.) H. per. glabrous shr., 2–3 ft. high, with pinnatifid l., and terminal racemes of trumpet-shaped mauve-pink fl. Turkestan.

Incarvillea Olgæ. (*Gfl* t. 1091.) H. biennial (?), 3–4½ ft. high. L. opposite, pinnate; the segments narrow oblong, pinnatifid. Fl. purple, in a lax terminal panicle. Corolla campanulate-infundibuliform, with 5 short rounded spreading lobes. Turkestan.

Indigofera Anil. (*B. M.* t. 6506.) Leguminosæ. S. One of the Indigo plants, of no horticultural merit. West Indies, &c.

Indigofera Dosua compacta. (*R. H.* 1877, 470.) H. per. with erect branches, very compact infl., and larger fl. of a vinous-rose colour. [*I. gerardiana*, Wall. var.]

Inula Hookeri. (*B. M.* t. 6411.) Compositæ. H. herb. per. 1–2 ft. high, laxly branched, slender, pubescent. L. 3–4 in. long, oblong-lanceolate, acute, sessile, very membranous, hairy above, tomentose beneath, slightly toothed, teeth ending in a gland. Fl.-heads solitary, yellow, 2½–3½ in. in diam.; involucre squarrose, shaggy: ray-florets numerous, linear, truncate, and 3-toothed. Sikkim Himalaya.

Ione paleacea. (*B. M.* t. 6344.) Orchidaceæ. S. epiphyte, with a creeping terete rhizome bearing at short intervals narrow obpyriform smooth green pseudobulbs, each with one ligulate l. 6–8 in. long and 1 in. broad, slightly notched at apex. Scape longer than l., erect, with closely adpressed sheaths in lower part: bracts lanceolate, acuminate, concave. Fl. few in a lax secund raceme, nodding, about 1 in. long: sep. pale green with red stripes: pet. small, roundish, greenish; margins denticulate: lip trowel-shaped, nearly as long as sep., red-brown, purplish at apex; margins denticulate. [Syn. *Balbophyllum paleaceum*, Benth.] Assam.

Ipomœa Bronsoni. (*G. and F.* 1892, 345.) Convolvulaceæ. S. A rapid grower with white stems, thickened at the base. Cuba.

Ipomœa camerunensis. (*Gfl.* t. 1352.) S. climber. This is merely an entire-leaved form of *I. paniculata*. Cameroons.

Ipomœa decora. (*G. C.* 1879, xi. 755.) S. per., with a woody woodstock, throwing up annual stems a yard high, with oval velvety l. and large white fl. with a rosy-purple centre. East Africa.

Ipomœa Horsfalliæ alba. (*G. C.* 1883. xix. 568; *Fl. and P.* 1883. 93.) S. climber. A charming var. with white fl. West Indies.

Ipomœa Kerberii. (*B. T. C.* 1894, 116, f. 32.) G. A species with heart-shaped l. and clusters of vivid scarlet fl. which in Southern Italy, where cultivated in the open air, completely cover the plant. South America.

Ipomœa Robertsii. (*B. M.* t. 6952.) S. twiner, softly pubescent, except the fl. L. petiolate, cordate, acute, 3–4 in. long, the hairs more or less stellate on both sides, with some scales on the upper surface. Fl. solitary peduncu-late. 3 in. in diam., white, striate with pink, and marked with five rosy-purple rays. Queensland.

Ipomœa setifera. (*B. T. O.* 1894, 116.) G. A plant with cut l. and a profusion of white perfumed fl. Temperate Brazil.

Ipomœa thomsoniana. (*Williams' Cat.* 1884, 8, 13; *G. C.* 1883, xx. 818, f. 147; *Fl. and P.* 1884, 28, 118, f.) S. A climbing species with the general habit of *I. Horsfalliæ*. L. trifoliolate, the leaflets stalked, elliptic or elliptic-oblong, acute, fleshy. Cymes axillary, few-flowered. Fl. 3 in. in diam., white.

Ipomœa Woodii. (*G. and F.* 1894, 123; *K. B.* 1894, 100.) S. A tuberous rooted per., with woody stems, cordate purple-tinted l. and short-stalked clusters of large bell-shaped rose-purple fl. Zululand.

Iris Agatha. (*Gard.* 1894, xlvi. 157.) Iridaceæ. H. A garden hybrid between *I. iberica*, var. and *I. Korolkowi renosa*.

Iris alata, var. **alba, cinerea, cupreata, lilacina, magna, nigrescens,** and **speciosa.** (*B. T. O.* 1889. 16–17.) H. A series of colour variations.

Iris Alberti. (*Gfl.* t. 999.) H. In the way of *I. germanica*. The colours are similar, but it is distinguished by the inner segments being suddenly contracted into a claw, the stigmatic lobes divaricate, acute, and the spathes green to the apex. Turkestan.

Iris albicans. (*W. G.* 1888, 325.) H. Similar in size and habit to *I. germanica*, but with pure white fragrant fl. Cyprus.

Iris albopurpurea. (*B. M.* t. 7511.) H. The nearest ally of this species is *I. hexagona*, a native of the Southern United States. The species was introduced to Kew from Japan with *I. lævigata*, from which it differs in having the inner segments erect instead of horizontally spreading. Fl. white, spotted with purple. Japan.

Iris arenaria minor. (*Gfl.* 1886, 116.) H. A dwarf var. with much smaller fl. than in the type.

Iris argentea. (*R. H.* 1891, 36, t.) H. per. A var. of *I. xiphioides*, with white falls blotched with purple. Garden origin.

Iris asiatica. (*Gard.* 1892, xli. 121, f.) H. A var. of *I. pallida*.

Iris assyriaca. (*Gard.* 1896, xlix. 265.) H. A species belonging to the *Oncocyclus* group, bearing white fl. in form like those of a large *I. caucasica*.

Iris athoa. (*G. C.* 1893, xiii. 711.) H. A more robust sp. than *I. subbiflora*, to which it comes very near. Fl. brownish-red-purple in colour. Mt. Athos, Turkey.

Iris atropurpurea. (*G. C.* 1889, v. 330; *Gfl.* 1889, 655.) H. H. Handsome Iris belonging to the *Oncocyclus* group; rootstock stout, furnished with fleshy fibres; l. linear, glaucous, ½ ft. long. Spathe one-flowered. Perianth-tube green, longer than the ovary. Falls oblong-cuneate, 2 in. long, 1½ in. broad: limb purplish-black, with a dense beard of yellow hairs down the claw. Standards orbicular-unguiculate, erect, 3 in. long, 2 in. broad. Syria.

Iris atrofusca. (*G. C.* 1893, xiii. 384; *B. T. O.* 1893, t. 7; *Gfl.* t. 1361, under name of *I. atropurpurea*.) H. As tall as *Iris susiana*, but the outer segments of the perianth are much shorter and a uniform brown-black. [This is *I. atropurpurea*, Baker, var. *atrofusca*, Baker; *B. M.* t. 7379.] Palestine.

Iris bakeriana. (*B. M.* t. 7084; *Gard.* 1889, xxxvi. 495, 570.) H. Of the *Reticulata* group. L. 3–4 to a bulb, subulate, hollow, with eight distinct ridges in long spirals, glaucous, 6–9 in. long at flowering time, eventually 12 in. long; fl. solitary: spathe cylindrical, valves unequal, lanceolate, perianth tube 3 in. long. Outer segments with a long obovate-elliptic claw, the blade on its upper half and edges rich dark violet, the lower part marked with violet spots on a creamy ground. Inner segments rather short, pale lilac Armenia.

Iris balkana. (*G. C.* 1878, x. 266.) H. A tufted dwarf species about 1 ft. high. L. 6-8 to a stem, glaucescent, ensiform, acute. Scape 2-flowered: fl. dark claret-lilac; the falls with a dense white beard tipped with lilac.

Iris Barnumæ. (*G. C.* 1888, iv. 182; *B. M.* t. 7050.) H. Rhizome slender, fleshy. L. 5-6 in a tuft, 6 in. long, linear, acute, slightly falcate. Scape $1\frac{1}{2}$–$5\frac{1}{2}$ in. long, 1-flowered. Falls cuneate-obovate, 2 in. long, 1 in. broad, reflexed at apex, dark red-purple with darker veins, the beard fluffy, the hairs yellow with purple tips. Standards roundish-obovate, connivent, crenate, red-purple, with darker veins and very few hairs on the claws. Styles very spreading, brownish-yellow, with purple dots and mid-line, and with purple crests. Armenia.

Iris Bartoni. (*G. C.* 1883, xix. 275; *B. M.* t. 6869.) H. In the way of *I. florentina*, which it resembles in its rhizome and l. Falls $3\frac{1}{2}$-4 in. long, $1\frac{1}{2}$ in. broad, spathulate, creamy white, with greenish-yellow veins and shadings on the limb, purplish-violet on the claw; beard white, tipped with orange yellow on the claw. Standards spathulate, emarginate, wavy, coloured like the falls, but whiter. Affghanistan.

Iris benacensis. (*Ver. Zool.-Bot. Ges. Wien*, 1887, 649.) H. 12–15 in. high. L. ensiform. Fl. mostly in threes, the lowest placed about the middle of the stem, the rest crowded at the apex. Falls elongate-obovate, dark violet, with darker veins; the claw whitish, veined with coppery violet; the beard white at the base, yellow above. Standards broad, oblong, submarginate, violet. Crests of stigma triangular, violaceous. Ovary oblong-cylindric. Tyrol.

Iris Biliotti. (*G. C.* 1887, i. 738.) H. A handsome sweet-scented species, resembling *I. germanica* in habit. Fl.-stem $2\frac{1}{2}$–3 ft. high. Falls $3\frac{1}{2}$ in. long, $1\frac{1}{2}$ in. broad, cuneate-spathulate, reddish purple, with fine blackish veins, bearded. Standards $3\frac{1}{2}$ in. long, 2 in. broad, connivent, blue-purple with fine blue veins. Styles obovate, white, with triangular reddish purple crests. Province of Siwas, Asia Minor.

Iris bismarckiana. (*W. G.* 1892, 355, 353, f. 72.) H. A fine plant, with sword-shaped l. about 8 in. long, of a bluish-green, and peduncles about 16 in. high, bearing one large fl.; the falls are ash-grey with darker veins and a black spot at the base; the standards are sky blue with blackish veins. Lebanon.

Iris Bloudowii. (*Ill.* t. 1020, f. 2.) H. A dwarf species with narrow ensiform l. and yellow fl., the three outer perianth-segments bearded. Altai.

Iris Boissieri. (*G. C.* 1887, ii. 38; *B. M.* t. 7097.) H. A handsome bulbous species, closely allied to *I. filifolia*, but differing in having a distinct tube above the ovary, broader and more obovate standards, and a long narrow claw to the outer segments, which are distinctly bearded. Fl. purple. Portugal.

Iris Bornmuelleri. (*W. G.* 1889, 401.) [*I. Danfordiæ*, Boiss.]

Iris bracteata. (*G. and F.* 1888, 43.) H. A distinct and rather peculiar species. Rhizome slender. L. solitary, rigid, 1–2 ft. long, $\frac{1}{2}$ in. broad, or less, striate, one side green, the other glaucous. Stem angled, shorter than the l., covered with imbricating purplish sheathing bracts, 2-flowered. Fl. large, nearly pure yellow, veined on the oblong-oblanceolate sep. with bluish purple. Pet. erect, narrow lanceolate. Styles spreading, recurved, with long crests. Oregon.

Iris caroliniana. (*G. and F.* 1893, 334, f. 51.) H. A species nearly allied to *I. versicolor*. North Carolina.

Iris caucasica cœrulea. (*G. C.* 1889, v. 588.) H. Resembling *I. caucasica* in all but colour of fl.; fl. pale lilac lined with violet, with a yellow patch on the fall. Caucasus.

—— Var. **oculata.** (*G. C.* 1889, v. 588.) Similar to type, but fl. yellow with blue markings. Caucasus.

Iris Cengialti. (*G. C.* 1886, xxv. 554, 555.) H. Much resembling *I. pallida*, but with smaller fl. and the l. dying down in winter. L. 6–9 in. long, $\frac{1}{2}$ in. or more broad, yellowish-green. Scape about 1 ft. high 3–4-flowered. Fl. like those of *I. pallida* but smaller, sky-blue flushed with violet. Monte Cengialto, Tyrol.

—— Var. **Loppio.** (*G. C.* 1886, xxv. 554–5.) H. This differs from the type in having bluish-green l., and rich dark

blue fl. with somewhat longer and narrower perianth segments. For other forms see also *G. C.* 1886, xxv. 586. Monte Baldo, North Italy.

Iris Cosniæ. (*Gard.* 1895, xlvii. 351.) H. A dwarf Iris with large fl. Standards clear yellow with dark purple markings, the falls of the same shade pencilled with purple.

Iris cretensis. (*B. M.* t. 6343.) H. Dwarf in habit. L. linear, 6–9 in. long. Fl. about on a level with l.; perianth-tube green, 3–4 in. long; perianth-segments with long claws and oblong limb, the three outer veined in the lower half with bright yellow, and marked with oblique lilac lines on a white ground: tips dark purple: inner segments entirely bright purple: all beardless. Crests of stigmas erect, linear, acuminate, serrulate on outer margins. Greece: Asia Minor.

Iris cypriana. (*G. C.* 1888, iv. 182.) H. Allied to *I. pallida*. L. ensiform, glaucous. Spathe-valves boat-shaped, becoming more or less scarious during the flowering. Falls cuneate-obovate 4½ in. long, 2½ in. broad, reddish-lilac, with darker veins, bearded with orange-tipped hairs. Standards oblong, 3½ in. long by 2½ in. broad, light bluish-lilac, spotted with reddish-brown on the claw. Styles pale lilac, the crests broadly triangular. Cyprus.

Iris Danfordiæ. (*G. C.* 1889, vi. 279: *B. M.* t. 7140.) H. Early-spring-flowering species, a near ally of *I. juncea*. Bulb ovoid, half as broad as long. Proper l. all radical, narrow linear, glabrous, produced after flowering. Scape 3–4 in. high, 1-flowered: fl. orange-yellow: falls spotted brown, and obscurely bearded, standards reduced to fine threads. [Syn. *Xiphium Danfordiæ*, Baker; *Iris Barnumelleri*, Hausskn.] Cicilian Taurus.

Iris Delavayi. (*R. H.* 1895, 398, ff. 128–9.) H. A tall growing *Iris* nearly allied to *I. sibirica*; fl. a beautiful violet-colour blotched with white. Yunnan, China.

Iris Duthieii. (*G. C.* 1887, i. 611.) H. Rhizome knotty and gnarled. L. appearing after the fl., 5–6 to a tuft, 2 ft. long, ½ in. broad, yellowish green. Fl. solitary, sessile: tube 3 in. or more long; falls nearly horizontal, lanceolate, bearded, red-lilac above with darker veins and blotches, beneath greenish yellow with the veins and blotches showing through: standards connivent, 1¼ in. long, oblong-ovate pale red-lilac with dark veins. Styles light red-lilac with triangular crenate crests. Kumaon, North India.

Iris ensata chinensis. (*Gn.* t. 1011.) H. Not a very attractive plant. L. linear, overtopping the fl. Scape usually two-flowered. Segments of the perianth all narrow, lanceolate, acuminate; the falls pale blue, with the central part yellowish veined with violet: inner segments erect, lilac. North China.

Iris Eulefeldi. (*Gn.* t. 954; *B. M.* t. 6902.) H. A dwarf species, with short rather blunt ensiform l., and a 2-flowered leafless scape. Fl. about 2 in. in diam.: falls bearded, cuneate-obovate, pale violet with darker veins; standards erect, spathulate, oblong: base yellow with darker veins, middle pale, apex light violet: stigmas purple, crests bifid. Thian Shan, Central Asia.

Iris fosteriana. (*B. M.* t. 7215: *G. C.* 1891, ix. 496.) H. A fine *Iris* of the *Caucasica* group. Sep. and standards primrose-yellow: limb spoon-shaped, deep violet.

Iris Gatesii. (*Gard.* 1889, xxxv. 523; *J. R. H. S.* xi. 144.) H. H. Of the *Oncocyclus* group. In the way of *I. susiana*, but more robust, and with larger fl. Fl. variable in colour, silvery yellow, netted with small distinct lines and minute spots of purple grey. Armenia.

Iris germanica gypsea. (*Ill. H.* 1893, t. 182.) H. A form with pale pearly-white fl.

—— Var. **semperflorens.** (*H. G.* 1890, 355, f. 73.) H. A long-flowering form. Italy.

—— Var. **Siwas.** (*G. C.* 1887, i. 739.) A var. with dark indigo-purple falls having light blue-purple claws, and dark blue-purple standards. Fr. very short, not much longer than broad. Province of Siwas, Asia Minor.

Iris Grant-Duffii. (*Damm. Cat.* 1893, 5; *B. M.* t. 7604.) H. A species closely allied to *I. sibirica* and *I. tenax*, with yellow and yellowish-white fl., veined with violet. Palestine.

Iris Haynei. (*Damm. Cat.* 1893, 5.) H. A species of the *Oncocyclus* group with upright glaucous l., and large elegant fl. of a dark grey colour dotted with black. Palestine.

Iris Helenæ. (*G. M.* 1894, 220 : *J. of H.* 227, f. 38.) H. A large-flowered dark purple *Iris* with a dwarf habit. Allied to *I. Sari*. Palestine.

Iris hexagona. (*B. M.* t. 6787.) H.H. A handsome species. Rootstock creeping ; stem 2-3 ft. high ; l. ensiform 2–3 ft. long ; fl. 4 in. in diam., in 2–3 clusters : outer segments broadly obovate, spreading, bright purple-blue, with a bright yellow keel ; inner segments erect, oblanceolate. lilac. Southern United States.

Iris hookeriana. (*G. C.* 1887, i. 611 ; *B. M.* t. 7276.) H. Rhizome somewhat fleshy. L. 1 ft. long, ¾–1 in. broad, yellowish green, appearing with the fl. Scape about 5 in. long, 2-flowered. Fl.-tube ½–⅓ in. long ; falls obovate-lanceolate, 1¾ in. long by ⅞ in. broad, reflexed, densely bearded, blue-purple with darker blotches above, green with purple borders beneath ; standards narrow obovate, ¾ in. long. ½ in. broad, blue-purple. Styles reddish purple, very concave, with triangular serrate revolute crests. Lahul, Bengal.

Iris iberica insignis. (*G. C.* 1879, xi. 694, 693, f. 100.) H. var. dwarfer and with much longer fl. than the type. Standards pale lilac, veined and thickly spotted with darker lilac ; falls white, veined with black lines, densely spotted and blotched with reddish-brown

—— Var. **paradoxoides.** (*W. G.* 1890, 277 : *G. C.* 1890, vii. 618.) H. var. with a broad purple beard on the spreading yellow outer segments ; the inner segments are purple with a darker network of veins. Garden variety.

Iris ib-parad. (*Gard.* 1894, xlvi. 157.) H. A garden hybrid between *I. iberica* and *I. paradoxa*.

Iris juncea numidica. (*W. G.* 1889, 443.) H. H. var. with light yellow fl., having the falls veined with black, and in general effect unlike any other Iris. Atlas Mountains.

Iris Kæmpferi Schirnhoferi. (*W. G.* 1888, 137, t. 1.) H. A var. with yellow fl. [*I. lævigata*, Fisch. var.] Japan.

Iris kingiana. (*G. C.* 1887, i. 611 ; *B. M.* t. 6957.) H. Rhizome knotty. L. 2 ft. long, ½ in. broad, yellowish green, appearing along with the solitary sessile fl. Tube 2½ in. long ; falls lanceolate-ovate, 1½ in. by ⅝ in. reflexed, bearded, purple with deep purple spots above, greenish white beneath, with the spots showing through ; standards erect, oblong-ovate. ¾ in. long, nearly ½ in. broad, purple. Styles purple with paler margins, crests obtusely triangular, reflexed, serrated and darker purple on the edge. Garwhal, India.

Iris Kochii. (*Ver. Zool.-Bot. Ges. Wein.* 1887, 649.) H. 12–16 in. high. L. ensiform, sub-glaucous. Fl. mostly in fours, the lowest on branches from about the middle of the stem. Falls cuneate-obovate, brilliant violet, the claws whitish, veined with copper-colour and bearded with yellow. Standards deep purple-violet with yellowish claws, veined with purple. Crests of stigma ovate-triangular violaceous. Istria.

Iris kolpakowskiana. (*Gfl.* t. 939.) H. Scarcely 6 in. high. Corm with brown reticulate tunics. L. 4–6 to a corm, 4–5 in. long at the time of flowering, subulate. Fl. scarcely overtopping the l. ; outer segments recurving, with the apical half rich dark purple, the basal half white veined with purple and with a bright yellow median stripe bordered with purple ; inner segments much narrower than the outer, erect, concave, lavender-purple ; stigmas a little spreading, lavender-purple ; crests deeply bifid. Turkestan.

Iris Korolkowi concolor. (*G. C.* 1888, iv. 37.) H. A var. with broader and more obtuse segments than the type, and the venation almost obscured by the general violet or purple colour.

—— Var. **leichtliniana.** (*G. C.* 1888 iv. 37.) H. A handsome form, with creamy white fl., marked with a blackish-purple blotch at the base of the falls.

—— Var. **nervosa.** (*Gfl.* 1888, 463.) Doubtless a typographic error for var. *venosa*.

—— Var. **venosa.** (*G. C.* 1888, iv. 37.) Fl. greyish-lilac, distinctly veined with purple.

—— Var. **violacea.** (*G. C.* 1888, iv. 37.) Fl. violet or puce-coloured with darker veins.

Iris lineata. (*Gfl.* t. 1244, f. 1–6 ; *G. C.* 1887, i. 679.) H. About 1 ft. high, with a creeping rhizome producing bulbs at intervals. L. erect.

narrow, acute, as long as the one-flowered scape. Fl. with lanceolate acute segments, greenish-yellow, veined with dull red-purple; the falls bearded with bluish-purple hairs and recurved; the standards erect, bearded with brownish purple. [*I. Suworowi*, Regel.] Turkestan.

Iris Lortetii. (*W. G.* 1890, 353; *B. M.* t. 7251.) H. Allied to *I. susiana* and *I. iberica*, between which it is almost intermediate. About 1 ft. high, with linear l. 6–8 in. long, and large handsome fl.: the falls pale grey-lilac with darker dots; the standards roundish, pale lilac. Asia Minor.

—— Var. **alba.** (*W. G.* 1896, 137.) H. Differing from the type in its pure white fl.

Iris lupina. (*G. C.* 1887, i. 738.) H. Rhizome fleshy, creeping. L. 9 in. or more long, ½ in. broad, light green. Peduncle 6 in. high, 1-flowered. Fl.-tube about 2 in. long; falls 3 in. long by 1¾ in. broad, broadly lanceolate, reflexed, serrate, bearded, greenish-yellow, with brownish-red veins towards the margins. Standards, 3¾ in. long, 2⅓ in. broad, elliptic, connivent, crenate, bearded, coloured like the falls. Styles much recurved, with rounded crests, yellow with brownish red veins and dots. Kharput, Asia Minor.

Iris lusitanica Viviani. (*W. G.* 1889, 356.) H. Fl. large, yellow, of a wax-like consistence. The falls are sulphur-yellow with transparent veins and marked with a large golden blotch. [*I. Xiphium*, Linn. var. Syn. *I. Viviani*. Sprenger.] Portugal.

Iris macrosiphon. (*W. G.* 1890, 354.) H. A small species with narrow linear l. 6–15 in. long from a slender rootstock. Fl.-stem slender 1–10 in. high, with 1 or 2 bright lilac-purple or sometimes cream-coloured fl. Tube very slender, sometimes as much as 3 in. long. California.

Iris Madonna. (*B. T. O.* 1892, 130.) H. H. evergreen, with large lilac-blue fl. Arabia.

Iris Mariæ. (*G. M.* 1893, 242.) H. A dwarf species with falls of a claret colour, and having a black crimson blotch in the centre of the base. Standards lilac with darker veins. [*H. Helenæ*, Barb.] Palestine.

Iris maricoides purpurea. (*B. T. O.* 1892, 129.) H. H. A var. with large purple fl. Syria.

Iris Meda. (*B. M.* t. 7040.) H. Rhizome short, creeping; l. linear, glaucescent, 3–4 in. long; stem as long as the l., one-headed; spathe one-flowered; valves lanceolate; perianth tube cylindric, 1 in. long; segments of the limb greenish yellow, veined from top to bottom with brown; outer segments oblong-cuneate, reflexed, brown in the centre, with a dense yellow beard; inner segments as long as outer, narrow, erect. Persia.

Iris Mon-spur. (*Gard.* 1890, xxxviii. 462, t.) H. A hybrid between *I. Monnieri* and *I. spuria*, resembling the latter species.

Iris nepalensis Letha. (*G. C.* 1892, xii. 458.) H. A var. of *I. nepalensis*, differing in its sessile and very fragrant fl. Upper Burma.

Iris orchioides. (*R. H.* 1880, 337, f. 68; *B. M.* t. 7111; *G. C.* 1889, v. 588.) H. Allied to *I. caucasica*. Bulb ovoid. Stem 6–12 in. high, bearing 2–3 fl. sessile in axils of upper l. L. 5–6, lanceolate, acuminate 6–9 in. long, bright green, face channelled. Fl. bright yellow, crests orange. Central Asia.

Iris pabularia. (*R. H.* 1888, 338; *W. G.* 1888, 477.) H. Said to be a good forage plant. [*I. ensata*, Thunb.?] Kashmir.

Iris parad-ib. (*Gard.* 1892, xli. 459.) H. A hybrid between *I. iberica* and *I. paradoxa*.

Iris para-var. (*J. of H.* 1896, xxxii. 536.) H. A garden hybrid between *I. paradoxa* and *I. variegata*.

Iris Parkor. (*G. C.* 1895, xvii. 612.) H. A garden hybrid between *I. paradoxa* and *I. Korolkowi*.

Iris reticulata alba. (*G. M.* 1894, 75.) H. Fl. white, with orange yellow crests.

—— Var. **Krelagei.** (*G. C.* 1879, xi. 500, f. 69.) H. Differs from the type in its shorter fl.-tube, duller colour, and in being destitute of perfume. Caucasus. Asia Minor.

Iris reticulata sophenensis. (*G. C.* 1885, xxiii. 470.) H. A var. with light reddish purple falls, and reddish lilac standards. Kharput, Asia Minor.

Iris robinsoniana. (*Bull Cat.* 1877, 6; *Gard.* 1891, xl. 313, t. 825; *G. C.* 1891, ix. 457; *G. and F.* 1891, f. 60.) G. The gigantic *Iris* from Lord Howe's Island. [*Moræa robinsoniana*, F. Muell.; *B. M.* t. 7212.]

Iris rosenbachiana. (*Gfl.* t. 1227: *B. M.* t. 7135.) H. A singular species, with small tapering bulbous roots. From the very short stem arise 3–4 convolute sheaths, forming a false stem 4–5 in. high, from which peep out four very short ensiform l. and one fl. with a very long tube. The outer perianth-segments are about 1 in. long, spathulate, obcordate, and very spreading: the inner segments are twice as long, oblanceolate, and erect with recurved tips; the stigmas are erect and deeply bifid. The fl. are either blue or purplish with the tips of the inner segments and stigmas blackish violet or violet purple: the inner segments have an elevated yellow ridge down the middle, with violet spots on each side of it. Turkestan.

Iris Sari lurida. (*B. M.* t. 6960.) H. Rhizome short, oblique, bearing about six falcate glaucescent l. Peduncle 1-flowered. Fl. large; falls spotted with purple-brown on a pale ground, with a large blackish blotch at the base; standards large, roundish, violet-purple, veined and spotted with darker colour. Asia Minor.

—— Var. **Nazarene.** (*G. M.* 1893, 211.) H. Of the *Oncocyclus* group, in general appearance near *I. Lortetii*. The falls are heavily marked with rows of brown-purple spots on a straw-coloured ground and have a large maroon blotch in the centre; standards creamy white with blue veins. Palestine.

Iris sindjarensis. (*B. M.* t. 7145: *G. C.* 1890, vii. 364, f. 55; *Gfl.* 1890, 394.) H. A bulbous species, allied to *I. caucasica*, *orchioides*, and *palæstina*. It is easily distinguished by its short stems, crowded green lanceolate l. and lilac and purple fl. Mesopotamia.

Iris Speculatrix. (*B. M.* t. 6306.) G. or H. H. Rhizome short, about ⅓ in. thick. L. 3 to a tuft, 12 in. long when in flower, lengthening afterwards, ¼–½ in. broad, linear, green. Fl.-stem slender, about 1 ft. long, bent above the middle; bracts, 2–4, adpressed. Spathe 3-valved, 2-flowered. Fl. 1½ in. in diameter; outer perianth-segments with an almost orbicular blade, light purple, with a double white spot surrounded by a dark border; claw spotted and veined with lilac and furnished with a yellow crest: inner segments oblanceolate, pale lilac, unspotted, erect, shorter than the outer ones. Hong Kong.

Iris Statellæ. (*B. M.* t. 6894.) H. Allied to *I. lutescens*. L. ensiform, 6–9 in. long, glaucous-green. Fl.-stem 1 ft. high, 2-flowered at apex. Fl. pale yellow, veined with green, and bearded with yellow on the broadly cuneate-obovate revolute falls: the standards are broadly oblong, obtuse, overarching the bifid styles. South Europe.

Iris stylosa. (*Gard.* 1894, xlvi. 248.) H. H. Five forms of this species are figured here.

—— Var. **grandiflora.** (*G. C.* 1889, vi. 666.) Habit of type, but with very large deep purple fl.

—— Var. **lilacina.** (*W. G.* 1888, 92, f. 15, 3.) A var. with smaller fl. than the type, of a tender lilac colour, with less pronounced yellow spots; crests of stigma very upright.

—— Var. **marginata.** (*W. G.* 1888, 93.) A peculiar var. having the violet fl. edged with white.

—— Var. **pavonia.** (*W. G.* 1888, 93.) A var. with a white radiating area at the base.

—— Var. **speciosa.** (*W. G.* 1888, 92, f. 15, 2; *B. T. C.* 1888, 165.) A var. with smaller l. and larger brightly-coloured fl. The falls are clear violet, with the basal part whitish veined with violet-purple: the standards are brownish purple.

Iris Suworowi. (*Gfl.* 1886, 397; *B. M.* t. 7029.) H. L. ensiform. Fl.-stem 2-flowered, as long as the l. Perianth-segments all elliptic-lanceolate, cuspidate, hyaline, greenish, with greenish-blue veins, the three outer ones bearded to the middle with blue. Bochara.

Iris tenuis. (*G. and F.* 1888, 6, f. 3.) H. Rhizome slender, creeping. L. thin, ensiform, ¼–½ in. broad. Stem very slender, 2–3-flowered, 10–12 in.

high. Peduncles distant, slender. 1½ in. long, leaf-like. Spathes small, scarious. Fl. small, white, marked with yellow and purple. Falls oblong-spathulate, spreading. Standards narrow, oblong, erect. Oregon.

Iris tingitana. (*B. M.* t. 6775.) H. H. bulbous species resembling *I. Xiphium*, but stouter, and making its growth in spring instead of autumn. Stem 2 ft. high. L. 6–7, linear, falcate, channelled down the face, glaucous-green. Fl. 2 3 together: perianth-tube produced above the ovary: the outer segments pale lilac with a yellow keel: inner segments narrow, erect, with incurved tips, purple; styles purple. Morocco.

Iris trojana. (*Ver. Zool.-Bot. Ges. Wein.* 1887, 650.) H. ? 3 ft. in height. L. ensiformg, laucescent, acute. Fl.-stem with several branches, the lower 3-flowered, the upper 2-flowered. Falls broadly cuneate-obovate, reflexed, brilliant purple-violet, the claws whitish with yellowish margins veined with coppery purple. Standards broadly elliptic, emarginate, violet. Crests of stigma broad, toothed, porrect, bluish violet. Fl. sweet-scented. Troy, Asia Minor.

Iris vaga. (*Gn.* t. 1244, f. 7.) H. Bulbs stoloniferous. L. 1 ft. long, nearly 1 in. broad. Scape 2 ft. high, 3-flowered. Falls yellowish, with purple veins and margin, bearded with bluish-white. Standards broadly lanceolate, acute, erect, dull purple, with the veins, margin, and apex fuscous, bearded with whitish-yellow. [*I. Leichtlini*, Regel.] Turkestan.

Iris Van-Houttei. (*Fl. and P.* 1882, 90.) H. Hybrid between *I. susiana* and *I. iberica*.

Iris Vartani. (*G. C.* 1885, xxiii. 438; *B. M.* t. 6942.) H. H. A bulbous species, in the way of *I. Histrio*. L. two to a bulb, 8–12 in. long, tetragonal, with sharp angles. Fl. 3 in. in diam., the falls with a narrow claw, and ovate-lanceolate blade of a creamy white, with lavender veins and yellow crests. Standard small, erect, linear-lanceolate, lavender. Styles with long pointed lavender crests. Palestine.

Isatis boissieriana. (*Journ. Bot.* 1876, 46.) Cruciferæ. H. annual, about 1 ft. high. Lower l. cuneate-oblong, acute, sinuate-dentate: upper l. cordate-sagittate, oblong, acute, entire. Infl. racemose-corymbose; fl. yellow. Silicules heteromorphous, pubescent. Turkestan.

Ischarum angustatum. (*B. M.* t. 6355.) Araceæ. H. H. tuberous aroid, flowering before the l. Infl. sessile: spathe rather narrow, about 6 in. long: tube short, greenish; blade blackish-purple: spadix rather shorter than the spathe, and of the same colour. L. petiolate; blade 4–5 in. long, oblong-lanceolate, narrowed at both ends, green. [*Biarum angustatum*, N. E. Br.] Syria.

Ismene andreana. (*G. C.* 1884, xxi. 11; *R. H.* 1884, 129, f. 30; *Fl. and P.* 1884, 28.) Amaryllidaceæ. S. Bulb bearing several linear pale green l., 12–15 in. long, contemporary with the fl. Scape slender, shorter than the l., 1-flowered. Ovary sessile: perianth-tube 4–5 in. long, green; limb white; the segments linear, 3½–4 in. long; corona broadly funnel-shaped, nearly 3 in. long, 3–4 in. broad, white with green stripes, and its marginal lobes rounded. [*Hymenocallis andreana*, Nichols.] Ecuador.

Ismene tenuifolia. (*B. M.* t. 6397.) S. bulb with 6–10 linear spreading l. 1 ft. long. Scape solitary, compressed, 2-edged, 6–8 in. long, 1-flowered. Perianth 6 7 in. long, white tinged with green outside: tube green, corona funnel-shaped, 2 in. deep, yellowish downwards, marked with 6 green stripes: margin with a spreading trifid quadrate lobe between each pair of stamens, sharply toothed on the outer border. [*Hymenocallis quitoensis*, Herb.] Ecuador.

Isoloma hirsutum. (*Bull Cat.* 1881, 18.) Gesneraceæ. S. herb. per. of free growth, producing an abundance of tubular orange-scarlet fl., with the upper lip scarlet and lower lip and throat spotted with scarlet.

Isoloma jaliscanum. (*G. and F.* 1896, 496.) G. Stem decumbent, pubescent: l. oblong-lanceolate 1–3 in. long; fl. in umbels, corolla 1 in. long, scarlet. Mexico.

Isoloma molle. (*Bull Cat.* 1876, 9.) S. Fl. on long red pedicels, axillary: corolla-tube 2 in. long, bulged in the upper part, where it is bright scarlet: lower half paler: the five rounded lobes yellow, spotted with crimson: throat also spotted. Venezuela.

Ixianthes retzioides. (*B. M.* t. 7409.) Scrophulariaceæ. G. A branching leafy shrub, 7 ft. high : l. crowded, 4 in. long, $\frac{1}{3}$ in. broad. pubescent ; fl. on short axillary peduncles, yellow ; tube inflated, nearly 1 in. long ; limb 5-lobed, spreading. South Africa.

Ixiolirion kolpakowskianum. (*Gfl.* 1889, 193.) Amaryllidaceæ. H. This is the correct name of the plant grown under the name of *Kolpakowskia ixiolirioides.*

Ixiolirion macranthum. (*W. G.* 1892, 346.) H. or G. bulb, with deep blue fl. shaded with purple. [*I. montanum*, Herb. var. *macranthum*, Regel.]

Ixiolirion Pallasii. (*Gfl.* t. 910 ; *Fl. des S.* t. 2270.) H. Bulb nut-like, blackish-brown ; stem slender, erect, 1–1½ ft. high, leafy. L. narrow linear, channelled down the face, often twisted. Inflorescence subpaniculate. Fl. pedunculate, 1½ in. in diam., rosy-purple. Caspian region.

Ixiolirion Sintenisi. (*W. G.* 1892, 346.) H. A species with blue fl. lighter than those of *I. macranthum.*

Ixiolirion tataricum Ledebouri. (*Gfl.* t. 1014.) H. L. linear, channelled, 6–8 in. long, weak. Stem 1 ft. high. Umbel few-flowered. Fl. 1 in. in diam., blue. [*I. montanum*, Herb.] Central Asia.

Ixora alba. (*Gfl.* t. 1037.) Rubiaceæ. S. shr. with large lanceolate acute l., 4–5 in. long, 1½–2 in. wide, and corymbose white fl. India.

Ixora armeniaca. (*Williams' Cat.* 1890, 26.) S. shr. of dwarf compact habit, with pale yellow fl. flushed with salmon.

Ixora bella. (*Bull Cat.* 1881, 18.) S. shr. with salmon-pink fl.

Ixora Burbidgei. (*Veitch Cat.* 1883, 14.) S. shr. very similar to *I. salicifolia* in general appearance, but with axillary as well as terminal dense cymose corymbs of bright orange-scarlet fl.

Ixora Chelsoni. (*Bull Cat.* 1879, 6.) S. A garden var. with large round trusses of bright orange-salmon fl. shaded with pink.

Ixora concinna. (*Bull Cat.* 1882, 16.) S. shr. A form with large compact trusses of bright salmon fl. changing to deep salmon-pink.

Ixora conspicua. (*Bull Cat.* 1886, 8.) S. A form with large trusses of buff-yellow fl. changing to bright orange.

Ixora decora. (*Bull Cat.* 1882, 16.) S. An attractive var. with yellow fl. flaked with crimson.

Ixora Duffii. (*Fl. and P.* 1878, 76.) S. L. 1 ft. long, oblong-lanceolate, acute. Fl. rich vermilion-red shaded with crimson, arranged in large globose cymose heads. [*I. macrothyrsa*, Teijsm. & Binn. ; *B. M.* t. 6853.] Malaya.

Ixora eminens. (*Bull Cat.* 1885, 14.) S. A garden var. with large well-formed fl., clear buff at first, afterwards changing to light salmon-pink.

Ixora eximia. (*Bull Cat.* 1881, 18.) S. shr. with large trusses of long-tubed buff fl., changing to salmon-pink.

Ixora findlayana. (*Williams' Cat.* 1883, 27.) S. Of free growth and short stocky habit. Fl. white, very fragrant. East Indies.

Ixora formosa. (*F. M.* t. 284.) S. shrub of compact dwarf free-flowering habit, with large globose trusses of orange-red fl.

Ixora Gemma. (*Bull Cat.* 1885, 14.) S. A var. with large compact trusses of rich orange-yellow fl.

Ixora illustris. (*Bull Cat.* 1881, 18.) S. A var. with bright orange-salmon fl.

Ixora Morsei. (*Williams' Cat.* 1884, 14.) S. A profusely flowering hybrid, having large trusses of bright-orange fl.

Ixora ornata. (*Bull Cat.* 1881, 18.) S. Producing trusses of bright orange-salmon fl. in great profusion.

Ixora picturata. (*Williams' Cat.* 1880, 16.) S. An hybrid between *I. Williamsii* and *I. coccinea.*

Ixora Pilgrimii. (*Williams' Cat.* 1881, 27, 35 ; *F. M.* 428, f.) S. A garden hybrid.

Ixora profusa. (*Bull Cat.* 1879, 6.) S. Like *I. Chelsoni*, with rich soft rosy-salmon fl. Garden variety.

Ixora Regina. (*F. M.* t. 225; *Bull Cat.* 1876, 9.) S. L. elliptic-ovate, acuminate, dark green above, paler below. Fl. in large very dense trusses, 6 in. or more in diameter, deep orange inclining to scarlet.

Ixora salicifolia variegata. (*G. C.* 1882, xviii. 71.) S. A var. having the l. marked with a feathered greyish stripe along the midrib. Sumatra.

Ixora salmonea. (*Bull Cat.* 1892, 3.) S. A garden var. with salmon and buff. fl.

Ixora speciosa. (*Bull Cat.* 1886, 8.) S. A var. with buff fl. changing to bright orange-salmon.

Ixora splendens. (*Fl. and P.* 1878, 129, t. 474.) S. A garden hybrid.

Ixora splendida. (*Bull Cat.* 1881, 19: *Ill. H.* 1882, t. 463.) S. shr. A showy var. with large trusses of bright orange-crimson fl.

Ixora venusta. (*Bull Cat.* 1882, 16.) S. A var. with fine trusses of bright orange fl. changing to salmon-buff.

Ixora Westii. (*Veitch Cat.* 1882, 18: *Fl. and P.* 1882, 52.) S. A garden hybrid between *I. odorata* and *I. amboinensis*.

Jankæa Heldreichii. (*G. C.* 1889, vi. 415.) Gesneraceæ. H. Allied to *Ramondia* and *Haberlea*; l. covered with a fine white tomentum; fl. cup-shaped, deep violet. Olympus, Thessaly.

Janthe bugulifolia. (*Gfl.* t. 883.) Scrophulariaceæ. H. per with *Verbascum*-like habit. L. radical and cauline, ovate-lanceolate, stalked, dentate, nearly glabrous, green. Fl.-stem 8–16 in. high; fl. resembling those of a *Verbascum*, yellowish-brown, subsessile in an elongate bracteate lax raceme. [*Celsia bugulifolia*, Jaub. and Spach.] Levant.

Jasminum affine. (*R. H.* 1878, 427, f. 87.) Oleaceæ. H. This is merely a form of the common white Jessamine, with larger trusses of fl. [*J. officinale*, Linn. var. *affine*, Dippel.]

Jasminum angulare. (*B. M.* t. 6865.) G. Scrambling shr., with angular stems, trifoliolate l., and terminal cymes of white fl. Calyx-teeth short, ovate, acute. Corolla-tube 1–1½ in. long, the limb with 5–6 spreading lanceolate lobes. South Africa.

Jasminum didymum. (*B. M.* t. 6349.) S. A winter-flowering climber. Stem slender. L. opposite, petiolate, trifoliolate; leaflets petiolate, oblong-obtuse, rounded at base, 1¼ in. long, green. Fl. in long racemose panicles, pure white: corolla-tube ½ in. long; limb ¼ in. diam. Berries one or two, shortly stipitate, ellipsoid, ½ in. long, deep purple. Australia and Pacific Islands.

Jasminum floridum. (*B. M.* t. 6719; *Fl. and P.* 1883, 169: *R. H.* 1884, 288.) H. shr., with alternate pinnately-trifoliolate l., and lax cymes of yellow fl. ½ in. in diam. Japan and China.

Jasminum gracillimum. (*B. M.* t. 6559; *Veitch Cat.* 1881, 8, 15; *G. C.* 1881, xv. 9, f. 2.) S. shr., with slender hairy recurving branches, opposite cordate-ovate acute l., and large subglobose heads of white sweetly scented many-petalled fl. North Borneo.

Jasminum polyanthum. (*R. H.* 1891, 270: *W. G.* 1891, 403; *B. T. C.* 1891, 289.) G. shr. A free flowering species with pinnate l., and panicles of long-tubed fl., pink outside, white within. Yunnan, China.

Jatropha urens. (*G. C.* 1880, xiv. 752, f. 146.) Euphorbiaceæ. S. Handsome bright green l., which are roundish in general outline and palmately divided into seven pinnatifid segments with acutely pointed lobes. The insignificant fl. are umbellate on long peduncles. Caution is necessary in handling the plant, as it is beset with stinging hairs. Tropical America.

Juncus lætevirens. (*Bull Cat.* 1880, 5.) Juncaceæ. G. per. L. in crowded tufts, 3 ft. high, remarkable for their vivid green colour. Japan.

Juniperus virginiana reptans. (*M. G. Z.* 1896, 296, f.: *M. D. G.* 1896, 55.) Coniferæ. H. A prostrate form.

—— Var. **turicensis.** (*Gfl.* 1896, 162.) H. A form of compact pyramidal habit with bluish grey l.

Jussiæa macrocarpa ciliata. (*Bull Cat.* 1880, 5.) Onagraceæ. H. H. Stems with five winged angles, hairy. L. alternate, ciliate. Fl. axillary, large, yellow, 2 in. across. Colombia.

Justicia campylostemon. (*G. C.* 1883, xix. 44.) Acanthaceæ. S. An unattractive plant about 2 ft. high, with ovate l., and dichotomously branched peduncles bearing few or several small white fl. spotted with purple on the middle lobe of the lower lip. South Africa.

Justicia marmorata. (*Williams' Cat.* 1881, 35.) S. foliage plant, with l. 10 in. long, 4 in. broad, light shining green, blotched and marbled with white.

Kæmpferia atrovirens. (*Ill. H.* 1886, t. 610; *Cat. Comp. Cont. d'Hort.* 1886, 7.) Scitamineæ. S. Of dwarf tufted habit. L. slightly spreading, obliquely elliptic-oblong, very dark green, 2–5 in. long, on erect petioles 4–5 in. long. Fl. 1½ in. in diam., of a beautiful mauve-purple with a whitish eye. Borneo.

Kæmpferia Gilberti. (*Fl. and P.* 1882, 52: *G. C.* 1882, xvii. 712, f. 112: *Bull Cat.* 1882, 17, f. 4.) S. A plant of tufted habit, with variegated foliage. L. lanceolate, acute, wavy, dark green bordered with white. Fl. purple and white. Burma.

Kæmpferia ornata. (*G. C.* 1885, xxiv. 328, 329, f. 69; *Cat. Comp. Cont. d'Hort.* 1884, 7, f.; *Ill. H.* 1884, t. 537.) S. foliage plant of dwarf tufted habit. L. lanceolate, acuminate, wavy at the edges, 4–8 in. long, 1–1½ in. broad, velvety, dark green above, with a feathered whitish stripe along the midrib; the under surface vinous purple. Borneo.

Kæmpferia secunda. (*B. M.* t. 6999; *G. C.* 1888, iii. 722; *Gard.* 1873, iv. 154, t.) S. per. herb, 6–10 in. high. Stems slender, with 5 or 6 lanceolate acuminate green l. Spike terminal, few-flowered. Fl. 1 in. in diam., bright purple, with a white spot at the base of the two upper segments, and a white stripe down the centre of the roundish bilobed lip. Assam.

Kæmpferia vittata. (*G. C.* 1882, xviii. 264.) S. foliage plant with petiolate elliptic obtuse l. of a dark velvety green with a somewhat feathered grey stripe along the midrib, and white fl. having an orange band on the lip. Sumatra.

Kalanchoe carnea. (*G. C.* 1886, xxv. 298; 1887, i. 211, f. 48.) Crassulaceæ. G. Glabrous succulent, with petiolate elliptic ovate obtuse crenate brownish-green l., 3–5½ in. long, 1½–3 in. broad, and corymbose cymes of fragrant pink fl. ½ in. in diam. With age the base of the stem forms a large bole. South Africa.

Kalanchoe Cassiopeia. (*Gfl.* 1894, 93.) G. A dwarf succulent, with *Echeveria*-like blue-green toothed l. Abyssinia.

Kalanchoe farinacea. (*Gfl.* t. 1143; *Fl. and P.* 1884, 58.) G. or S. species with orbicular spathulate obtuse entire mealy-white l., and a dense terminal cymose umbel of scarlet fl. Socotra.

Kalanchoe glaucescens. (*W. G.* 1894, 457, f. 70.) G. Sometimes attaining a height of 2 ft. or upwards with a terete glabrous stem and irregularly crenate obtuse l. Fl. in panicles, red or dark yellow. Abyssinia.

Kalanchoe marmorata. (*G. C.* 1892, xii. 300; *B. M.* t. 7333.) G. Allied to *K. schimperiana*. Per. with leafy stems, obovate cuneate l. 4 in. long, green blotched with brown. Cymes few-flowered; corolla-tube 2 in. long: limb 2 in. wide, white. Abyssinia.

Kalmia cuneata. (*G. and F.* 1895, 434, f. 60.) Ericaceæ. H. A deciduous shrub with slender straggling stems 2–3 ft. high: fl. ¾ in. in diam., creamy white with a broad light red band at the base of the limb. North Carolina.

Kalmia latifolia Pavarti. (*R. H.* 1888, 540, t.) H. Garden variety.

Kalmia myrtifolia. (*R. H.* 1883, 10, f. 1.) H. This is merely a dwarf form of *K. latifolia*.

Karatas Acanthocrater. (*B. M.* t. 6904.) Bromeliaceæ. S. [Syn. *Nidularium Acanthocrater.*]

Karatas amazonica. (*G. C.* 1886, xxv. 814.) S. Bromeliad, with a rosette of lanceolate l. 1–1½ ft. long, 2–3 in. broad, greenish brown on the face, glossy claret-brown on the back, without markings or scales, finely

serrated on the margins. Fl. in a dense sessile head in the centre of the rosette, white with a greenish tube: the bracts and inner l. greenish-brown. [Syn. *Bromelia amazonica* and *Echmea amazonica*, Hort.] Brazil.

Karatas antiacantha. (*G. C.* 1888, iv. 474.) S. Something in the way of *K. Legrellæ*, but larger. The l. are brownish at the base, and the bracts of a deeper scarlet. [Probably the plant intended is *Bromelia antiacantha*, Bert., which is more correctly named *B. fastuosa*, Lindl.]

Karatas humilis. (*R. H.* 1878, 190, f. 35.) S. This is the old *Bromelia humilis* under a new generic name.

Kendrickia Walkeri. (*G. C.* 1896, xx. 394.) Melastomaceæ. S. Climber with creeping ivy-like stems, ovate fleshy grey-green l. and terminal umbels of large bright red fl. Ceylon.

Kennedya ovata cærulea. (*Jard.* 1888, 93.) Leguminosæ. G. A var. with blue fl. Australia. [*Hardenbergia monophylla*, Benth. var.]

Kentia elegantissima. (*L. Hort. Int. Cat.* 1888-9, 43.) Palmæ. No description or locality given.

Kentia gracilis. (*Ill. H.* 1876, t. 245.) Palmæ. G. Of graceful habit. L. on long slender whitish petioles: limb pinnate, having a somewhat orbicular outline: pinnæ 12–14 on each side, narrowly linear, acute, very gracefully curving downwards. [This is not *K. gracilis*, Brongn. et Gris: and Brongniart and Gris' description, copied verbatim from the original source, is obviously wrongly appended to the illustration.] New Caledonia.

Kentia Lindeni. (*Lind. Cat.* 1876, 7.) S. Of vigorous growth, with the young l. of a pale red, becoming when mature dark green with metallic reflections, pale buff below. [*Kentiopsis macrocarpa*, Brongn.] New Caledonia.

Kentia Luciani. (*Lind. Cat.* 1878, 5; *Ill. H.* 1885, t. 451.) S. Palm allied to *K. Lindeni*, with large thick coriaceous bright green l. on golden-yellow petioles.

Kentia Macarthurii. (*Veitch Cat.* 1879, 26, f. 15.) S. L. pinnate; leaflets arching, linear-oblong, truncate or oblique, and unequally toothed at the apex, 4–8 in. long. [*Ptychosperma Macarthurii*, Wendl.] Australia.

Kentia wendlandiana. (*Bull Cat.* 1878, 7.) S. Palm with gracefully spreading pinnate l.; pinnæ unequal, numerous, toothed at apex, the upper ones confluent at the base. Spadix much branched. [*Hydriastele wendlandiana*, H. Wendl. & Drude.] Queensland.

Kentiopsis divaricata. (*Ill. H.* 1881, t. 409.) Palmæ. S. L. pinnate, dark green, in the young state reddish. Leaflets numerous, linear lanceolate, acute. New Caledonia.

Kentiopsis macrocarpa. (*R. H.* 1884, 372.) S. Palm with pinnate l., the young ones being of a reddish colour, and the petioles of the older l. purplish beneath. New Caledonia.

Keramanthus Kirkii. (*B. M.* t. 6271.) Passifloraceæ. S. per. softly hairy. Stems several from the root, 2–4 ft. high, fleshy, 2–3 in. thick at base, tapering upwards, sparingly branched. L. alternate, stalked, 2–4 in. in diam., orbicular-ovate, obtuse, cordate at base, sinuate-toothed, palmately veined, green. Stipules subulate. Fl. fascicled in the axils of the l., green outside, whitish within. Pedicels 1–1½ in. long. Calyx 1 in. long, oblong-urceolate, shortly 5-lobed; lobes ovate, fringed on the thickened margins. Petals small, linear, hairy, inserted half way up the calyx and included in it. Fr. a large globose brownish berry. Zanzibar.

Kerchovea floribunda. (*B. H.* 1882, 201, t. 8.) Scitamineæ. S. per. 4–5 ft. high, well furnished with ovate-oblong acute green l. and terminal lax panicles of violet purple fl. with rose-coloured bracts. [*Stromanthe.*] Brazil.

Kickxia africana. (*K. B.* 1895, 241; *Icones Plantarum*, t. 1276.) Apocynaceæ. S. A large tree, 60 ft. high; l. oblong-lanceolate: fl. in short axillary cymes, yellow. A valuable rubber tree. [Possibly the plant in cultivation is *K. elastica*, Preuss.] West Tropical Africa.

Kirengeshoma palmata. (*G. C.* 1891, 202; *Bot. Mag. Tokio*, v. t. 18.) Saxifragaceæ. H. A per. with upright stems 2–3 ft. high, large lobed l. and conspicuous bell-shaped yellow flowers.

Kniphofia aloides glaucescens. (*Gard.* 1889, xxxvi. 458, t.) Liliaceæ. H. H. A garden var. with very large heads of flowers.

Kniphofia citrina. (*G. C.* 1893, xiv. 552.) H. H. Leaves and peduncle like *K. Macowani*, but with shorter pale yellow fl. and exserted stamens. South Africa.

Kniphofia comosa. (*B. M.* t. 6569.) H. H. A dwarfer plant than *K. aloides*, with linear strongly keeled l. 2–4 ft. long, ½–¾ in. broad. Fl.-spike short. Fl. yellow, funnel-shaped; stamens and style bright red, twice as long as the perianth. Abyssinia.

Kniphofia Kirkii. (*G. C.* 1887, ii. 712.) H. H. Much in the way of *K. aloides*, with green acutely keeled l. 5–6 ft. long, 1½–2 in. broad at base, scabrous on the edge and keel. Peduncle 4 ft. high, with two large bract-leaves. Raceme dense. Bracts firm and green, concave and half twisted to one side. Fl. 1¼–1½ in. long, reddish-orange, gradually narrowed towards the base. South-east Tropical Africa.

Kniphofia Leichtlinii. (*B. M.* t. 6716; *Fl. and P.* 1883, 169; *R. H.* 1884, 240.) H. H. L. 3–4 ft. long, spreading all round the plant, linear, sharply keeled, bright green, not glaucous. Fl.-stem 3–4 ft. high: raceme dense, 3–4 in. long, 1½–2 in. in diam.; fl. pendulous, ¾ in. long, yellow and red, inflated-campanulate in the upper part. Abyssinia.

— Var. **distachya.** (*G. C.* 1884, xxii. 230.) H. H. A robust var. with broader l., and the fl. rather shorter than in the type; peduncle sometimes producing two or three heads.

Kniphofia longicollis. (*G. C.* 1893, xiii. 683; *B. M.* t. 7623.) H. H. Dwarfer than *K. aloides*, with bright green ensiform l., short racemes, and large clear yellow fl. Natal.

Kniphofia modesta. (*B. M.* t. 7293.) H. H. Distinct in having linear pale green smooth-edged l. 2 ft. or more long, and a slender erect panicle 2 ft. high of white fl. ⅓ in. long. Natal and Griqualand.

Kniphofia natalensis. (*Gard.* 1889, xxxvi. 459; *G. C.* 1889, vi. 562.) H. H. A rather pretty species. L. bright green, 2–3 ft. long. Fl.-stem 2–3 ft. high. Heads rather loose, 6–8 in. long. Fl. orange-red, with darker red veins, the lower or older ones yellow slightly tinged with red. Natal.

Kniphofia Nelsoni. (*G. C.* 1892, xi. 554, f. 83.) H. H. A distinct species resembling *K. triangularis*. L. spreading, 1½ ft. long, 3-nerved. Scape 2 ft. high, slender. Fl. densely crowded, brilliant orange-scarlet. Orange Free State.

Kniphofia Northiæ. (*Journ. Bot.* 1889, 43; *Gard.* 1889, xxxvi. 459; *G. C.* 1889, vi. 562; *B. M.* t. 7412.) H. H. L. 30–50 in a regular rosette, glaucous, channelled on the face, and without any keel; margins finely serrated. Fl.-stems stout, 4–6 ft. high; heads dense, 1 ft. long, 4–5 in. in diam.; fl. pale yellow, upper ones reddish; style slightly exserted. South Africa.

Kniphofia pallidiflora. (*G. C.* 1887, ii. 396; *R. H.* 1887, 166.) H. H. A small-flowered species. 1–2 ft. high, with linear semiterete l., 6–12 in. long by 1 line broad, and a raceme of somewhat funnel-shaped white fl. 4½ lines long. Madagascar.

Kniphofia pauciflora. (*B. M.* t. 7269; *G. C.* 1889, vi. 65. f. 10.) H. H. A doubtfully hardy species distinguished from most of the genus by its slender habit, narrow l., lax racemes, and pale yellow fl. Natal.

Kniphofia pauciflora × Macowani. (*G. C.* 1893, xiv. 424.) H. H. A garden hybrid between the two species indicated by the name.

Kniphofia Tuckii. (*G. C.* 1893, xiii. 68.) H. H. A species resembling *K. pumila*, but differing in its shorter broader green l., the perianth-tube widening from base to throat, and in the less exserted stamens. South Africa.

Kniphofia quartiniana. (*G. C.* 1876, v. 42; *GH.* t. 907.) H. H. L. all radical, 1½–2 ft. long, 3–4 in. broad at base, lanceolate, gradually acuminate, serrulate, bright green. Scape 3 ft. high. Fl. in a dense raceme, bright yellow: stamens and style exserted. Abyssinia.

Kniphofia Uvaria maxima. (*B. M.* t. 6553.) H. H. [*K. aloides*, Moench.]

Kniphofia Woodii. (*Gard.* 1895, xlviii. 292.) H. H. Resembling *K. modesta* in general characters, but stouter, and the l. with marginal spines. Scape 3½ ft. high. Fl.-heads 9 in. long, cream-yellow. Natal.

Kœlreuteria bipinnata. (*B. M.* 1888, 393, f. 93; *G. and F.* 1888, 376; *Jard.* 1888, 59.) Sapindaceæ. H.? tree. L. bipinnate, 2 ft. or more long, and nearly as broad; pinnæ few, each with nine or ten ovate acute toothed leaflets. Fl. resembling those of *K. paniculata*, disposed in large panicles, bright yellow, with a purple spot at the base of the pet. Fr. broadly elliptic, 2½ in. long, purple when ripe. Yunnan, China.

Kolpakowskia ixiolirioides. (*Gfl.* t. 953.) Amaryllidaceæ. H. bulb, with about four linear channelled l. in a whorl at the base of stem and 1-2 on the stem above. Fl. few, in a lax raceme, pale purple, about 1¼ in. long; perianth-tube very slender, narrow, linear-lanceolate, acute, spreading, recurved. The three outer stamens with thick claviform filaments. [*Ixiolirion kolpakowskianum*, Regel.] Lake Sairan, Central Asia.

Korolkowia discolor. (*G. C.* 1888, iii. 105; *Gfl.* 1886, 349.) Liliaceæ. H. [*Fritillaria Sewerzowi*, Regel, var. *bicolor*.]

Kunzea pomifera. (*G. C.* 1889, v. 201, f. 36; *W. G.* 1889, 156.) Myrtaceæ. G. A little shrub with terminal clusters of fruit like those of *Myrtus Ugni* and called "Muntries" by the natives of Australia; extensively used for jam-making.

Labichea lanceolata. (*B. M.* t. 6751.) Leguminosæ. G. A little shrub with sessile simple or trifoliolate l., with linear-oblong or elliptic-lanceolate pungent-pointed leaflets, and few-flowered axillary racemes of yellow fl., 1 in. in diam. Petals 4, orbicular, the upper one with two red spots at the base; stamens 2, one of which is very large and horn-like. South-west Australia.

Labisia alata. (*Ill. H.* 1886, t. 605.) Myrsinaceæ. S. shr. of dwarf habit, with large lanceolate acute l. of a peculiar chalky-green above, dull green beneath, the base of the blade being continued as a broad wing down the petiole. The stout axillary peduncles are about 4–6 in. long, with small clusters of small whitish fl., pinkish outside. Borneo; Malacca.

Labisia malouiana. (*Ill. H.* 1885, t. 580; *Cat. Comp. Cont. d'Hort.* 1886, 7.) S. foliage plant, of dwarf habit, with fine lanceolate acute subsessile l. of a very dark green, marked along the midrib with a feathery band of whitish green, purplish beneath. Borneo.

Labisia pothoina. (*Ill. H.* 1885, t. 561.) S. A dwarf shr., with gracefully spreading lanceolate acute l. 5–8 in. long, 1½-2 in. broad, on terete ferruginous petioles; fl. small, pinkish, arranged in spike-like panicles arising from the axils of most of the l. Reintroduced, after having been lost to cultivation for many years: *Botanical Register*, 1845, t. 48. Borneo; Singapore.

Labisia smaragdina. (*Ill. H.* 1892, t. 160.) S. Almost stemless, with a rosette of oblanceolate obtuse bright green l., and panicles of pretty pink fl. Borneo.

Laburnum monstruosum fastigiatum. (*R. H.* 1879, 260.) Leguminosæ. H. A form of *L. vulgare* with erect flexible branches.

Laburnum serotinum. (*R. H.* 1879, 260.) H. late-flowering tree. Leaflets small, coriaceous, very obtuse or truncate, shining and slightly bullate. Fl. crowded in a pendant raceme, sulphur-yellow.

Laburnum tardiflorum. (*R. H.* 1878, 120.) H. tree. A var. of the common *Laburnum* which flowers towards the end of the summer.

Lacæna spectabilis. (*B. M.* t. 6516.) Orchidaceæ. S. plant with lax pendulous racemes of pinkish white fl. minutely dotted with purple; the trowel-shaped lip very densely covered with dark purple dots so as to give it a purple-brown colour. Mexico.

Lachenalia aurea gigantea. (*G. C.* 1893, xiii. 290, 364.) Liliaceæ. G. Differs from the type in having taller and stouter fl.-scapes. A plant at Kew bore spikes 19 in. high with 27 open fl.

Lachenalia aureo-reflexa. (*G. C.* 1887, i. 576.) G. Garden hybrid.

Lachenalia Comesii. (*Gfl.* 1891, 358, f. 77.) G. A garden hybrid between *L. reflexa* and *L. quadricolor*.

Lachenalia fistulosa. (*G. C.* 1884, xxi. 668.) G. A species with fleshy green lanceolate l., 4 in. long, ½ in. broad, and a green scape bearing a lax

spike of fragrant fl. Fl. ½ in. long; the outer segments white, tinged with blue; the inner ones white, edged with purple. South Africa.

Lachenalia lilacina. (*G. C.* 1884, xxi. 668.) G. A species with fleshy falcate lanceolate l., glossy, spotted with black, and a slender greenish-red scape mottled with brown, bearing a lax spike of lilac fl. Fl. ¼ in. long. South Africa.

Lachenalia Nelsoni. (*F. M.* t. 452.) G. A garden hybrid between *L. tricolor* and *L. aurea*.

Lachenalia odoratissima. (*G. C.* 1884, xxi. 668.) G. L. lanceolate, fleshy, blistered; scape greenish, bearing a moderately dense raceme of whitish fl. with green tips. South Africa.

Lachenalia pendula aureliana. (*R. H.* 1890, t. 376.) G. A robust var. with red fl. Garden variety.

Lachenalia quadricolor præcox. (*Gfl.* t. 1312, f. 1.) G. Fl. produced about Christmas time. [*L. tricolor*, Thunb. var. *quadricolor*, Baker.]

Lachenalia reflexa. (*Fl. and P.* 1883, 58.) G. A species with pairs of recurved l. 6–8 in. long by 1 in. broad, and racemes of bright yellow fl. tipped with green. South Africa.

Lachenalia regeliana. (*Gfl.* 1891, 356, f. 76.) G. A garden hybrid between *L. reflexa* and *L. aurea*.

Lachenalia tigrina Warei. (*G. C.* 1884, xxi. 372.) G. L. oblong-lanceolate, copiously spotted with dark green. Scape green, spotted with red-brown. Fl. 10–12 in a dense raceme, 1 in. long; outer segments red at the base, yellow in the middle, tipped with green; inner segments greenish-yellow, with a reddish-brown margin. [*L. rubida*, Jacq. var.] South Africa.

Lactuca macrorhiza. (*G. C.* 1881, xvi. 492.) Compositæ. H. per. A rock-work plant with a thick fleshy rootstock, giving off numerous decumbent stems. L. variously formed, ranging from oblong entire to lyrate-pinnatifid. Fl.-heads laxly corymbose, of a light purple colour. Himalaya.

Lælia albida bella. (*W. O. A.* t. 239.) Orchidaceæ. S. A var. with larger fl. than the type: fl. of a milk-white colour, tinged with lilac-pink on the tips of the petals, and having the front lobe of the lip broadly bordered with rose-purple, with three yellow keels on the disk. Mexico.

—— Var. **stobartiana.** (*G. C.* 1877, vii. 271; *R.* ser. 1, t. 68.) S. A var. with large purplish tips to the sep. and pet., and the borders of the front lobe of the lip deep purple.

—— Var. **sulphurea.** (*G. C.* 1884, xxi. 76.) S. A var. with large sulphur-coloured fl., having a light mauve hue on each side of the front lobe of the lip, and dark purple marks at its base.

Lælia amanda. (*G. C.* 1882, xviii. 776; *Ill. H.* 1891, t. 135.) A garden hybrid.

Lælia amœna. (*O. R.* 1894, 334.) G. A garden hybrid between *L. anceps* and *L. pumila*.

Lælia anceps alba. (*G. C.* 1879, x. 756: xi. 11; *Bull Cut.* 1879, 6.) S. A var. with ovate ribbed pseudobulbs shorter than in the type, and large pure white fl. with a dash of yellow on the disk of the lip and the column light green; the fl. are 4–5 in. in diam. Mexico.

—— Var. **amabilis.** (*G. C.* 1889, v. 104.) S. Fl. white, with a yellow lip marked with purple lines and streaks.

—— Var. **amesianum.** (*G. C.* 1888, iv. 660.) S. A var. with white sep. and pet. of firm substance; the sep. have an emerald green dot at their apex, and the pet. are feathered with crimson at the tips. Lip rich violet-crimson, with the tube yellow streaked with purple inside, white outside, and with a central 3-ridged orange keel.

—— Var. **ashworthiana.** (*G. C.* 1894, xv. 84, 103, f. 10.) S. Fl. snow-white with bluish veinings in the labellum.

—— Var. **blanda.** (*G. C.* 1885, xxiii. 206.) S. A var. with white sep. and rosy pet.; the middle nerve of the sep. light-green; front lobe of the lip warm purple: angles of the side lobes rosy, with purple dots; middle area pale yellow, with numerous shining elevated purplish brown stripes.

—— Var. **calvertiana.** (*G. C.* 1883, xix. 78.) S. A var. somewhat like the var. *Dawsoni*, but with narrower

pet., a rose border to the side lobes of the lip, and the front lobe wholly red-purple.

Lælia anceps crawshayana. (*J. of H.* 1895, xxx. 67, f. 12.) S. A giant form with broad pet. and rich colours.

—— Var. **hilliana.** (*G. C.* 1881, xv. 169.) S. A var. with the front lobe of the lip two-lobed, and with a deep orange-coloured disk.

—— Var. **hollidayana.** (*G. C.* 1894, xv. 84.) S. Remarkable for the rich crimson veining of the labellum.

—— Var. **holocheila.** (*G. C.* 1891, ix. 426; *G. and F.* iv. 173, f. 31.) S. Differs from the type in having an entire narrow labellum.

—— Var. **hyeana.** (*L.* v. t. 226.) S. A handsome var. with large white fl. having a stripe of light yellow on the disk of the lip and some purple veins on the side lobes.

—— Var. **kienastiana.** (*G. C.* 1886 xxv. 298.) S. A var. with the pet. and side lobes of the lip of a fine rosy colour.

—— Var. **leeana.** (*G. C.* 1884, xxi. 445.) S. A small-flowered var. with white sep. and pet.; the pet. narrow and very acute; side lobes of the lip white outside, yellow within, with light purple tips. On each side of the mid-line of the lip are 2 reddish-purple stripes and some oblique reddish stripes running over the yellow zones.

—— Var. **leucosticta.** (*G. C.* 1885, xxiii. 206.) S. A var. with white or light rosy markings on the darker rosy sep. and pet.

—— Var. **lineata.** (*G. C.* 1895, xviii. 734.) S. Differs from the type in having sep. white and crimson with brown lines.

—— Var. **munda.** (*G. C.* 1886, xxv. 298.) S. A var. with the white side lobes of the lip marked with purple veins, and the yellow of the lip confined to the three keels.

—— Var. **obscura.** (*G. C.* 1886, xxv. 41.) S. A var. with very long narrow sep. and pet. of very dark colour, the sep. with a white area at base. Lip dark purple, with a dark orange disk.

Lælia anceps oweniana. (*G. C.* 1892, xii. 744; *J. of H.* 1892, xxv. 569, f. 77.) S. A large richly coloured var., the fl. being flaked with white.

—— Var. **protherœana.** (*G. C.* 1896, xix. 40.) S. Sep. and pet. white at the base, the rest bright rose-purple: lip yellow with purple lines and a crimson-purple front lobe.

—— Var. **pulcherrima.** (*G. C.* 1883, xix. 110.) S. A var. with the tip of the lip truncate and the lateral angles and front third of the middle lobe mauve-purple; disk light orange with purple-brown veins.

—— Var. **radians.** (*G. C.* 1888, iii. 200; *O.* 1888, 355.) S. Sep. and pet. deep purple with a white basal area. Lip very dark purple, with the disk of the side lobes dark orange, and a few dark purple lines.

—— Var. **rosea.** (*G. C.* 1880, xiii. 104.) S. Fl. bright rose-colour. Disk of the lip yellow, marked with dark lines.

—— Var. **sanderiana.** (*G. C.* 1885, xxiii. 140; 1887, i. 281, f. 59.) S. This appears to be a form of the var. *Dawsoni*, in which the transverse purple zone is divided into two blotches by a white area.

—— Var. **schrœderiana.** (*G. C.* 1885, xxiii. 342.) S. A var. with white fl. with an orange disc to the lip, and some crimson-purple radiating lines upon it.

—— Var. **Schrœderæ.** (*G. C.* 1887, i. 72.) S. A fine var. having the sep. whitish rose, the pet. rose with purple tips, and the lip with a brown disk, yellow side areas, warm purple borders to the side lobes, and a very dark blackish purple front lobe.

—— Var. **scottiana.** (*W. O. A.* t. 325.) S. A var. with rich mauve sep. and pet. and a dark purple lip with a yellow throat.

—— Var. **Stella.** (*G. C.* 1887, i. 152, 280, f. 58.) S. A large-flowered form of the var. *Williamsii*, with a yellow throat to the lip marked with carmine lines, the rest of the fl. being pure white.

—— Var. **thomsoniana.** (*G. C.* 1890, viii. 716; *H. G.* 1890, 558.) S. Resembles the var. *amesiana*, but has larger fl.

Lælia anceps veitchiana. (*G. C.* 1883, xix. 274.) S. A var. with white sep. and pet.: disk of the lip light yellow with brown veins; angles of the side lobes and front part of the middle lobe purple-mauve with darker stripes.

—— Var. **vestalis.** (*G. C.* 1880, xiii. 136.) S. A very fine var. with white sep. and broad white pet., and having the callus, disk, and bases of the side lobes of the lip of a deep shining sulphur-colour.

—— Var. **virginalis.** (*G. C.* 1887, i. 11.) S. Fl. pure white, marked only on the disk and crests of the lip with pale sulphur-yellow.

Lælia arnoldiana. (*G. C.* 1891, ix. 740; *J. of H.* 1891, 491, f. 93.) S. A garden hybrid between *L. purpurata* and *Cattleya labiata*. [Syn. *Lælio-cattleya arnoldiana*.]

Lælia autumnalis alba. (*G. C.* 1889, vi. 420.) G. A white-flowered variety.

—— Var. **atrorubens.** (*G C.* 1879, xii. 232; *Gard.* 1880, xvii. t. 229.) G. A form with purple-crimson fl.

—— Var. **Fournieri.** (*R. H.* 1896, 547, t.) G. A large-flowered dark-coloured variety.

—— Var. **venusta.** (*Veitch Man. Cattl.* 62.) G. Var. with large fl. of a nearly uniform rose-mauve.

—— Var. **xanthotropis.** (*R.* ser. 1, t. 10; *Veitch Man. Cattl.* 62.) G. A var. with shorter and smaller rigid leathery l., and broader pet. than in the type. Fl. in drooping racemes, of a delicate rosy purple, with the tips of the sep. and pet. and front lobe of lip darker purple; keels yellow. Mexico.

Lælia batemaniana. (*G. C.* 1886, xxvi. 263.) S. An interesting garden hybrid between *Sophronitis grandiflora* and *Cattleya intermedia*. [*Sophro-cattleya batemaniana*, Rolfe.]

Lælia bella (*G. C.* 1884, xxi. 174.) G. A garden hybrid between *L. purpurata* and *Cattleya labiata*.

Lælia callistoglossa. (*G. C.* 1882, xvii. 76; *W. O. A.* t. 235.) G. A garden hybrid between *Lælia purpurata* and *Cattleya Warscewiczii*.

Lælia caloglossa. (*G. C.* 1877, vii. 202.) G. A garden hybrid between *Cattleya labiata* and *Lælia crispa* or *L. lobata*.

Lælia canhamiana. (*W. O. A.* under t. 193; *G. C.* 1885, xxiv. 6.) G. A garden hybrid between *Cattleya Mossiæ* and *Lælia purpurata*.

Lælia cinnabarina crispilabia. (*Veitch Man. Cattl.* 63.) G. [Syn. *L. crispilabia*, A. Rich.]

Lælia crawshayana. (*G. C.* 1883, xix. 142.) G. Much in the way of *L. albida* and *L. anceps*; sep. and pet. narrow, amethyst-coloured: lip open near the slender column, with obtuse-angled side lobes, and a cuneate obtuse middle lobe, purple with a middle yellow line on the disk. A supposed hybrid between *L. anceps* and *L. autumnalis* or *L. albida*.

—— Var. **leucoptera.** (*G. C.* 1884, xxi. 577.) G. A var. with light rosy sep. and pet., and a rather narrow lip, the front lobe of which is mauve-purple, the side lobes white.

Lælia crispa Cauwelærtiæ. (*Ill. H.* 1891, t. 121.) G. A var. with the basal half of the lip of a greenish-yellow colour. Brazil.

—— Var. **delicatissima.** (*G. C.* 1881, xvi. 364.) G. A var. with white fl., the lip having a broad mauve-purple stripe from the base to the middle; front of lip pale yellow, and the sep. light purple on the back.

Lælia dayana. (*G. C.* 1877, vi. 772: *W. O. A.* t. 132.) S. Similar to *L. pumila*, differing from it in having a very dark purplish border and very dark veins covered with dark low lamellæ. [*L. pumila*, Reichb. f. var. *dayana*.]. Brazil.

Lælia dellensis. (*G. C.* 1889, v. 695.) S. Raised from *L. purpurata* crossed with *L. elegans*.

Lælia digbyana-Mossiæ. (*G. C.* 1889, v. 658, 742, f. 111; *Gard.* 1889, xxxv. 469; *O.* 1889, 175, f.) S. A garden hybrid between *L. digbyana* and *Cattleya Mossiæ*.

Lælia dominiana. (*G. C.* 1878, x. 332.) S. A supposed hybrid between *Cattleya dowiana* and *Lælia elegans*.

Lælia rosea. (*Veitch Man. Cattl.* 95.) S. Garden hybrid.

Lælia dormaniana. (*G. C.* 1880, xiii. 168.) S. Pet. and sep. olive, marbled outside with light port-wine colour, which is diffused as a light line inside, excepting at the top of the odd sep. and pet., which have numerous dark spots around the limb. Lip very pale purple, with darker veins; middle lobe mauve-purple. Brazil.

Lælia elegans alba. (*Ill. H.* 1884, t. 526.) S. A form with white fl. 6 in. in diam., having the middle lobe of the lip and a middle line running to its base rich carmine-magenta.

—— Var. **blenheimense.** (*W. O. A.* t. 393.) S. A var. having the central area of the sep. pale rosy-purple, with the margins and the pet. of a deeper rosy-purple; the lip is magenta-purple with a light yellow throat.

—— Var. **broomeana.** (*G. C.* 1890, viii. 214; *W. O. A.* t. 413.) S. Sep. white and rose; pet. broad, purplish rose; lip glowing crimson.

—— Var. **excellens.** (*G. C.* 1892, xii. 566.) S. A var. coloured like that known as *Turneri*, but with the folded portion of the lip pure white.

—— Var. **houtteana.** (*L.* ii. t. 71.) S. A var. with rich rose-purple fl., the side lobes of the lip being whitish. Sep. lanceolate, acute, with recurved tips. Pet. twice as broad as the sep., rhomboid, obtuse. Brazil.

—— Var. **incantans.** (*G. C.* 1887, ii. 333.) S. A large-flowered var., with dark nankeen sep. and pet. suffused with light purple at the edges, and the lip with the front lobe and tips of the side lobes rich dark purple, the disk being reddish and the rest white, partly suffused with pale yellow.

—— Var. **measuresiana.** (*G. C.* 1887, i. 209.) S. A var. with sulphur-coloured sep. and pet.; the sep. washed and spotted outside with light brown-purple; pet. bordered with purple on the apical part. Lip with the front lobe dark purple, disk purple, side areas white, and apex of side lobes purple.

—— Var. **morreniana.** (*W. O. A.* t. 331; *G. C.* 1888, iii. 800.) S. A var. with magenta-rose sep. and pet., and the front part of the lip rich magenta-crimson, margined with lilac.

Lælia elegans nobilis. (*G. C.* 1894, xvi. 257.) S. A var. with fl. of a clear rosy-crimson tint.

—— Var. **Nyleptha.** (*G. C.* 1888, iii. 178, t.) S. A var. with large fl. 7 in. broad, faintly tinged with rose at first, changing to sulphur yellow, the lip with a white tube, and the front lobe and tips of the side lobes crimson.

—— Var. **picta.** (*G. C.* 1884, xxi. 140.) S. A var. with light rose sep. and pet., marked with greyish zones and small dark purple spots. Lip yellow, with the tips of the side lobes and disk purple.

—— Var. **platychila.** (*G. C.* 1885, xxiv. 134.) S. A var. with narrow sep. and pet. without any green colour, and with a remarkably broad lip.

—— Var. **tautziana.** (*G. C.* 1888, iii. 330; *O.* 1888, 295.) S. A large-flowered form with broad light purple sep. and broad cuneate-obovate dark purple pet. Lip with white side lobes tipped with purple, and a sessile dark purple front lobe. Pseudobulbs stout. L. very broad and thick.

Lælia euspatha. (*R.* ser. 1, t. 8; *Veitch Man. Cattl.* 88.) S. A fine species allied to *L. purpurata* and *L. elegans*, with stout clavate pseudobulbs, 1 ft. high, having one thick oblong emarginate l., 9–11 in. long by about 2½ in. broad. Spathes large, 4–5 in. long. Fl. large, delicate rosy white on the lanceolate sep. and pet. The obscurely three-lobed lip is pale yellow in the tube and rich dark purple on the front part. Brazil.

Lælia eyermaniana. (*G. C.* 1888, iv. 91, 109, f. 12: *G. and F.* 1888, 315.) S. A curious species, with a raceme of 3-4 rosy-purple fl. about 2 in. in diam. Sep. and pet. oblong, blunt. Lip 3-lobed, the front lobe wavy; disk with 3 yellow keels.

Lælia finckeniana. (*G. C.* 1893, xiii. 194; xiv. 806, f. 123.) S. A supposed natural hybrid between *L. autumnalis* and *L. anceps*, but probably only a var. of the latter species.

Lælia flammea. (*G. C.* 1895, xvii. 168.) S. A garden hybrid between *L. cinnabarina* and *L. Pilcheri*.

Lælia flava aurantiaca. (*G. C.* 1895, xvii. 468.) S. A var. with fl. of a glowing pure orange colour.

Lælia gottoiana. (*G. M.* 1891, 379.) S. A var. or natural hybrid imported along with *L. grandis*. Fl. 7 in. across, rose-coloured; lip purple, lined with maroon.

Lælia gouldiana. (*G. C.* 1888, iii. 41; *G. and F.* 1888, 4; *O.* 1888, ii. 100; *R.* ser. 1, t. 59.) S. A handsome plant, allied to *L. autumnalis* and *L. crawshayana* with fusiform 2-leaved pseudobulbs, cuneate-oblong l. nearly 1 ft. long, and fl. as large as those of *L. autumnalis*. Sep. and pet. broad, acuminate, warm purple. Lip with long white side lobes edged with light purple, and a cuneate-obovate retuse middle lobe, dark purple, white at the base, veined and spotted with darker purple, and with 3 yellow keels on the disk.

Lælia grandis tenebrosa. (*O.* 1891, 161; *G. C.* 1891, x. 126; *R.* ser. 2, t. 33; *L.* vii. t. 290; *Gn.* 1891, 495.) S. A handsome form with coppery bronze sep. and pet., and a trumpet-shaped lip of a rich purple bordered with white. Serra da Itaraca, Brazil.

Lælia harpophylla Claudii. (*G. C.* 1895, xvii. 210.) G. A var. with broad segments of a rich orange scarlet colour.

Lælia horniana. (*G. C.* 1888, iii. 770.) S. Garden hybrid.

Lælia irrorata gaskelliana. (*G. C.* 1887, ii. 520.) S. A var. with pale lilac sep. and pet., and a dark purple front lobe to the lip, marked with darker purple: the area between the lilac-tipped side lobes white with a lilac mid line. [*L. elegans*, Reichb. f. var.]

—— Var. **scottiana.** (*G. C.* 1883, xix. 142.) S. A var. with long narrow acute sep. and broader acute pet. of a light rose colour; lip purple with a broad reddish-brown middle line tinted with mauve, and long white side lobes, washed with light purple on the borders.

Lælia juvenilis. (*O.* 1890, t. 240.) S. A garden hybrid between *L. Perrinii* and *L. Pinelli marginata*.

Lælia leeana. (*G. C.* 1882, xvii. 492.) S. A form with narrow rose-coloured sep. and pet., and a white lip with the tips of the lateral lobes and some veins of a rich purple. A supposed hybrid of Brazilian origin.

Lælia lilacina. (*Veitch Man. Cattl.* 89.) S. Peduncle 2- or more-flowered. Sep. and pet. pale lilac. Lip white marked on the inside of the side lobes with purple lines, and with a rayed purple blotch on the disk.

Lælia lucasiana. (*O. R.* 1893, 265.) S. Allied to *L. crispilabia*, from which it differs in having a yellow lip; the other parts of the fl. purplish mauve.

Lælia majalis alba. (*G. C.* 1880, xiv. 588.) S. A var. with white fl. Colombia.

Lælia Maynardii. (*G. C.* 1893, xiii. 206, 715, f. 108.) S. A garden hybrid between *L. pumila dayana* and *L dolosa*.

Lælia measuresiana. (*W. O. A.* t. 207.) S. Stems 1 ft. high, clavate, compressed, and furrowed, bearing 1–2 thick oblong emarginate l., and a corymbose raceme of 3–4 large and handsome fl. Sep. and pet. white. Lip light yellow on the front part, which is frilled on the margin. [*L. elegans*, Reichb. f. var.] Brazil.

Lælia monophylla. (*B. M.* t. 6683; *G. C.* 1882. xviii. 782.) S. A free-flowering little species, with very slender 1-leaved stems and slender 1-flowered peduncles, with 2–3 greyish speckled sheaths. Fl. 1½ in. in diam., excepting the purple anther entirely orange-scarlet; sep. and pet. equal, oblong, acute; lip exceedingly small, adnate to the column. Jamaica.

Lælia mylamiana. (*G. C.* 1876, vi. 740, f. 138.) S. Garden hybrid between *Cattleya granulosa* and *Lælia crispa*.

Lælia Normanni. (*G. C.* 1893, xiii. 98.) S. A garden hybrid between *L. pumila marginata* and *Cattleya dowiana*.

Lælia oweniana. (*G. C.* 1892, xii. 191.) S. A garden hybrid between *L. pumila dayana* and *L. xanthina*.

Lælia Oweniæ. (*L.* viii. t. 374.) S. A supposed natural hybrid between *L. Perrinii* and *L. elegans*.

Lælia Pachystele. (*G. C.* 1888, iv. 596.) S. Fl. as large as those of *L. elegans*. Sep. and the broader wavy pet. light rose. Lip very narrow;

side lobes long and narrow, white, with light purple borders ; front lobe narrow, oblong, acute, rose, with darker purple veins.

Lælia Perrinii alba. (*G. C.* 1888, iv. 446, 565.) S. A white-flowered var. with a tinge of yellow on the disk of the lip.

—— Var. **irrorata.** (*G. C.* 1882, xvi. 717.) S. A var. of a very light rose colour ; lip nearly white, with a pale yellow disk and light purple apex.

—— Var. **nivea.** (*G. C.* 1880, xiii. 264 ; *Williams' Cat.* 1881, 35 ; *F. M.* t. 429.) S. A white-flowered var. with the front of the lip bordered with purple and the disk yellow.

Lælia philbrickiana. (*G. C.* 1879, xii. 102.) S. A garden hybrid between *Lælia elegans* and *Cattleya Aclandiæ*.

Lælia pilcheriana lilacina. (*G. C.* 1886, xxv. 617.) S. This is merely a small-flowered form.

Lælia porphyritis. (*G. C.* 1886, xxv. 73.) S. Pseudobulbs cylindrical, furrowed, 1-2-leaved. Fl. similar to that of *L. pumila*. Sep. ligulate, acute, purple and greenish ; pet. broader, light purple : lip warm purple with a light yellowish disk. [A supposed hybrid between *L. pumila* and *L. dormaniana*.] Brazil.

Lælia præstans alba. (*G. C.* 1889, vi. 420.) S. Fl. ivory white, with a crimson-tipped lip. [*L. pumila*, Reichb. f. var.]

Lælia pumila curleana. (*G. C.* 1886, xxvi. 712.) S. A var. having a few dark streaks on the sep., and some oblique radiating lines on the margins of the pet. and outside the lobes of the lip.

—— Var. **delicata.** (*G. C.* 1896, xx. 471.) S. A var. with nearly pure white fl.

—— Var. **mirabilis.** (*B. H.* 1878, 279, t. 17.) S. A var. differing from the type in its larger deeper-coloured fl. with 10–12 small crests at the base of the labellum. Brazil.

—— Var. **spectabilis.** (*G. C.* 1880, xii. 489.) S. A var. with fl. nearly equalling those of *L. majalis*.

Lælia purpurata albanensis. (*G. C.* 1895, xvii. 580.) G. A var. with broad white segments and a deep purple lip.

—— Var. **albo-purpurea.** (*Lind. Cat.* 1896, 48.) S. Colour variety.

—— Var. **Aliciæ.** (*Lind. Cat.* 1896, 48.) S. Colour var. with a large labellum.

—— Var. **amœna.** (*Lind. Cat.* 1896, 48.) S. A form near *L. Schræderi*.

—— Var. **Annæ.** (*Lind. Cat.* 1896, 48.) S. Colour var. with a rounded labellum.

—— Var. **ashworthiana.** (*G. C.* 1896, xx. 39, f. 10.) S. A var. with broad pet. coloured purple-rose and striped with white.

—— Var. **blenheimense.** (*W. O. A.* t. 346.) S. A var. with blush-rose sep. streaked with rosy purple, deep rosy purple pet. veined with a darker colour, and a very dark purple lip with a deep yellow throat veined with dark purple, and the apex rosy purple veined with dark purple. South Brazil.

—— Var. **brunnea.** (*Lind. Cat.* 1896, 48.) S. Form with a brownish purple labellum and creamy petals and sepals.

—— Var. **carminea.** (*Lind. Cat.* 1896, 48.) S. Colour var. with a long lip.

—— Var. **Ceres.** (*Lind. Cat.* 1896, 48.) S. Colour var. with large pet. and sep. and a roundish undulate lip.

—— Var. **delecta.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **dives.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **discolor.** (*O. R.* 1893, 199.) S. A var. with bluish-white sep. and purple-veined pet.

—— Var. **Emiliæ.** (*Lind. Cat.* 1896, 49.) Colour var. with a rounded lip.

—— Var. **enfieldensis.** (*G. C.* 1895, xvii. 662.) G. A very large and richly coloured form.

Lælia purpurata Fascinatrix. (*Lind. Cat.* 1896, 49.) S. Colour var. with elongated lip, and yellow disk.

—— Var. **fastuosa.** (*L.* ix. t. 385.) S. A large-flowered var. with rose-purple sep. and pet. and a deep maroon lip.

—— Var. **formosa.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **handleyana.** (*G. C.* 1892, xi. 700.) S. A dark-coloured variety.

—— Var. **Josephinæ.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **Juno.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **Lewisii.** (*G. C.* 1896, xix. 655.) S. Fl. wholly white, save a few faint lines of lilac-pink on the lip.

—— Var. **Lindeni.** (*Lind. Cat.* 1896, 49.) S. Colour variety.

—— Var. **lineata.** (*Lind. Cat.* 1896, 51.) S. Colour variety.

—— Var. **lobata.** (*Lind. Cat.* 1896, 51.) S. Form with an elongated lip.

—— Var. **lowiana.** (*G. C.* 1887, i. 799.) S. A var. with rose-coloured sep. and pet., and a very dark mauve-purple lip with very little yellow at the base.

—— Var. **macrochila.** (*Lind. Cat.* 1896, 51.) S. Form with a large lip.

—— Var. **majestica.** (*Lind. Cat.* 1896, 51.) S. Differing from the last in colour.

—— Var. **Mariæ.** (*Lind. Cat.* 1896, 51.) S. Colour var. with a large lip.

—— Var. **Minerva.** (*Lind. Cat.* 1896, 51.) S. Colour variety.

—— Var. **nobilis.** (*G. C.* 1893, xiii. 641.) S. A var. with richly-marked fl.

—— Var. **Phœbe.** (*Lind. Cat.* 1896, 51.) S. Colour variety.

—— Var. **præstans.** (*Lind. Cat.* 1896, 51.) S. Colour var. with a large lip.

—— Var. **princeps.** (*Lind. Cat.* 1896, 53.) S. Large-flowered form.

Lælia purpurata pulchra. (*Lind. Cat.* 1896, 51.) S. Colour variety.

—— Var. **purpurea.** (*G. C.* 1893, xiii. 641.) S. A var. with darker coloured fl. than usual.

—— Var. **striata.** (*Lind. Cat.* 1896, 52.) S. Colour variety.

—— Var. **triumphans.** (*Lind. Cat.* 1896, 52.) S. A deep-coloured variety.

—— Var. **whiteana.** (*G. C.* 1888, iii. 681.) S. A var. with a dark purple lip, without yellow in the throat.

Lælia rubescens alba. (*Veitch Man. Cattl.* 82.) S. A var. with white fl. marked with a yellow stain on the lip.

—— Var. **rosea.** (*Veitch Man. Cattl.* 82.) S. Fl. rosy mauve, with a dark purple blotch on the lip. [Syn. *L. pedunculatis*, Lindl.]

Lælia Sanderæ. (*G. C.* 1893, xiv. 406.) S. A garden hybrid between *L. xanthina* and *L. dormaniana*.

Lælia Sedeni. (*G. C.* 1877, viii. 424.) S. A garden hybrid between *Cattleya superba* and *Lælia devoniensis*.

Lælia superbiens decorata. (*G. C.* 1888, iii. 200.) S. A form with narrow sep. and pet., and a dark purple lip, with the side lobes covered by a close dark purple network of veins.

—— Var. **quesneliana.** (*W. O. A.* t. 383.) S. A handsome form, with rosy-mauve sep. and pet., and the lip of an intense magenta-purple with yellow crests and disk. Mexico; Guatemala.

Lælia tresederiana. (*G. C.* 1888, iii. 136; *H. G.* 1888, 176; *O.* 1888, 198.) S. Garden hybrid.

Lælia triophthalma. (*Veitch Man. Cattl.* 97.) S. [Syn. *Cattleya triophthalma*, Reichb. f.]

Lælia virens. (*G. C.* 1879, xi. 716.) S. Something in the way of *L. cinnabarina*, but with greenish yellow sep. and pet. and a narrow 3-lobed white lip. Brazil.

Lælia vitellina. (*G. C.* 1893, xiii. 336, 365, f. 53.) S. A supposed hybrid between *L. harpophylla* and and *L. Perrinii*.

Lælia wyattiana. (*G. C.* 1884, xx. 426; *Fl. and P.* 1883, 169.) S. In the way of *L. crispa*, with white sep. and pet.; the somewhat undulate front lobe of lip light purple, veins on the disk dark purple, and outside of side lobes light yellow. A supposed hybrid between *L. crispa* and *L. lobata*. Brazil (*l*).

Lælia xanthina agraphis. (*G. C.* 1888, iv. 264; *H. G.* 1888, 503.) S. A var. without purple markings on the lip.

Lælio-cattleya albanensis. (*G. C.* 1893, xiv. 584.) Orchidaceæ. G. A supposed natural hybrid between *Cattleya Warneri* and *Lælia grandis*. It has pseudobulbs like those of the *Cattleya* but longer, and fl. 5 in. across, coloured as in the *Cattleya*, with wavy pet. Brazil.

Lælio-cattleya amœna delicata. (*L.* viii. t. 367.) G. A garden hybrid between *Cattleya Loddigesii* and *Lælia Perrinii*.

Lælio-cattleya Amesiæ. (*G. C.* 1895, xviii. 455.) G. A garden hybrid between *Lælia crispa* and *Cattleya maxima*.

Lælio-cattleya amplissima. (*J. O.* 1894, 253.) G. A hybrid, the parents of which are not given.

Lælio-cattleya andreana. (*R. H.* 1895, 401; *G. C.* 1895, xviii. 293.) G. A garden hybrid between *Cattleya bicolor* and *Lælia elegans*.

Lælio-cattleya arnoldiana. (*L.* vii. t. 299.) S. This is the same as *Lælia arnoldiana*.

Lælio-cattleya bella. (*G. C.* 1888, iii. 361; *H. G.* 1888, 229.) S. [*Lælia bella*, Reichb. f.]

Lælio-cattleya broomfieldiensis. (*G. C.* 1894, xvi. 194, 223, f. 33.) G. A garden hybrid between *Lælia pumila præstans* and *Cattleya aurea chrysotoxa*.

Lælio-cattleya brymeriana. (*G. C.* 1895, xviii. 338.) G. A garden hybrid between *Lælio-cattleya amanda* and *Cattleya Warscewiczii*.

Lælio-cattleya canhamiana. (*R. H.* 1895, 359.) G. A garden hybrid between *Cattleya Mossiæ* and *Lælia purpurata*.

Lælio-cattleya Cauwenberghei. (*L.* ix. t. 428.) G. A garden hybrid supposed to be between *Cattleya granulosa* and *Lælia purpurata*.

Lælio-cattleya corbeillensis. (*R. H.* 1894, 527.) G. A garden hybrid between *C. Loddigesii* and *C. dayana marginata*.

Lælio-cattleya darwiniana. (*O. R.* 1895, 293.) G. A garden hybrid between *Lælio-cattleya elegans* and *Cattleya maxima*.

Lælio-cattleya elegans Cooksoni. (*G. C.* 1889, vi. 586.) G. A var. of *Lælia elegans*, distinguished by its entire bright crimson-purple lip.

—— **Var. leucotata.** (*L.* ix. t. 413.) G. [*Lælio-cattleya schilleriana*, Hort. which see.]

Lælio-cattleya elsteadensis. (*O. R.* 1895, 293.) G. A garden hybrid between *L. xanthina* and *Cattleya bicolor*.

Lælio-cattleya Ghislainiæ. (*O. R.* 1896, 39.) G. A garden hybrid between *Lælia harpophylla* and *Cattleya Prinzii*.

Lælio-cattleya gottoiana rosea. (*G. C.* 1895, xviii. 467.) G. A supposed natural hybrid between *Lælia tenebrosa* and *Cattleya labiata*.

Lælio-cattleya hardyana. (*G. C.* 1895, xviii. 248.) G. A garden hybrid between *Cattleya Gigas* and *Lælia purpurata*.

Lælio-cattleya Harrisii. (*G. C.* 1895, xvii. 748.) G. A garden hybrid between *Lælia schilleriana* and *Cattleya Mossiæ*.

Lælio-cattleya highburyensis. (*G. C.* 1896, xix. 468.) G. A garden hybrid between *Lælia cinnabarina* and *Cattleya lawrenciana*.

Lælio-cattleya Ingramii. (*J. of H.* 1892, xxv. 141, f. 20.) G. A garden hybrid between *Lælia pumila dayana* and *Cattleya aurea*.

Lælio-cattleya jacobiana. (*R. H.* 1895, 359.) G. A garden hybrid between *Cattleya Mendelii* and *Lælia purpurata*.

Lælio-cattleya Lindeni. (*L.* x. t. 447.) G. A var. of *Lælio-cattleya elegans*, remarkable for the rich plum-red colour of its fl.

Lælio-cattleya marriottiana. (*G. C.* 1892, xi. 503.) G. A garden hybrid between *Lælia flava* and *Cattleya Skinneri*.

Lælio-cattleya pittana. (*G. C.* 1894, xv. 264.) G. A supposed natural hybrid between *Cattleya guttata Prinzii* and *Lælia grandis*.

Lælio-cattleya ridolfiana. (*B. T. O.* 1893, 72, t. 3.) G. A garden hybrid between *Lælia purpurata Aurora* and *Cattleya Mossiæ picta*.

Lælio-cattleya Sallieri. (*R. H.* 1895, 511.) G. A garden hybrid between *Lælia purpurata Williamsi* and *Cattleya Loddigesii*.

Lælio-cattleya Sanderæ. (*O. R.* 1893, 363.) G. A garden hybrid between *Lælia xanthina* and *Cattleya dormaniana*.

Lælio-cattleya sayana. (*J. O.* 1894, 220.) G. A hybrid, the parentage of which is not given.

Lælio-cattleya schilleriana leucotata. (*O. R.* 1894, 237.) G. A pure white var., according to the figure of it published in *Lindenia*, or sometimes flushed with rose. [*Lælio-cattleya elegans*, Hort. var. *leucotata*; *L.* ix. t. 413.]

Lælio-cattleya schulziana. (*L.* xi. t. 489.) G. A garden hybrid between *Lælio-cattleya elegans* and *Cattleya labiata*.

Lælio-cattleya statteriana. (*G. C.* 1893, xiv. 631; *J. of H.* xxvii. 463, f. 67.) G. A garden hybrid between *Lælia Perrinii* and *Cattleya labiata*.

Lælio-cattleya varjenevskyana. (*L.* x. t. 466.) G. A garden hybrid between *Lælia grandis* and *Cattleya Warneri*, identical with *Lælio-cattleya albanensis*, see *O. R.* 1895, 164.

Lælio-cattleya velutino-elegans. (*G. C.* 1896, xx. 360.) G. A garden hybrid between the species indicated in the name.

Lælio-cattleya wargnyana. (*L.* xii. t. 535.) G. A garden hybrid.

Lælio-cattleya Wellsiæ. (*G. C.* 1894 xvi. 378.) G. A garden hybrid between *Lælia purpurata* and *Cattleya labiata*, var.

Lagenaria virginalis. (*G. C.* 1892, xi. 85, f. 16.) Cucurbitaceæ. S. A var. of the Bottle Gourd (*L. vulgaris*) with waxy white fr.

Lamium maculatum aureum. (*R. H.* 1878. 420.) Labiatæ. H. Only differs from the type in its yellow l. and stems.

Lamourouxia Pringlei. (*G. and F.* 1895, 273, f. 39.) Scrophulariaceæ. G. A much-branched erect shr. 3–5 ft. high. with small ovate sessile l. and tubular bi-labiate fl. 1½ in. long, crimson. Mexico.

Lamprococcus speciosus. (*G. C.* 1893, xiii. 414.) Bromeliaceæ. S. L. tufted, leathery, finely toothed, bright green, with broad longitudinal stripes of yellow. Brazil.

Lamprococcus Vallerandi. (*R. H.* 1877, 129, f.) S. L. 3–4 ft. long, about 3 in. broad, linear, acuminate, concave down the face; margins spinose-dentate. Infl. spicate, dense; scape and peduncles rosy, farinaceous; bracts large, lanceolate, acute, concave, rosy, pulverulent outside, bright rose and glabrous inside. Fl. pale lilac, with violet tips. [*Streptocalyx Vallerandi*, E. Morr.] Brazil.

Landolphia florida. (*B. M.* t. 6963; (*G. C.* 1887, i. 804.) Apocynaceæ. S. A handsome climber, with large opposite elliptic-oblong bluntly pointed l., and dense compact cymes of fragant white fl., 1¾ in. in diam., with narrow spreading lobes. Tropical Africa.

Lanium Berkeleyi. (*K. B.* 1894, 392.) Orchidaceæ. S. Pseudobulbs small, linear-oblong; l. short; racemes bearing small green fl. with minute red-brown dots. Brazil.

Lanium subulatum. (*K. B.* 1896, 46.) S. Small in all its parts, the l. subulate and the fl. pale green. Brazil.

Lapeyrousia grandiflora. (*B. M.* t. 6924.) Iridaceæ. G. Similar in habit to *Anomatheca cruenta*, but larger. Corm small, stoloniferous. L. 6–12 in. long, ½ in. broad. Spikes 4–10-flowered. Fl. 2 in. in diam., bright red with a yellow eye; the

three lower segments marked with a large triangular dark crimson spot. South-east Tropical Africa.

Laportea moroides. (*B. M.* t. 7057.) Urticaceæ. S. A stinging-nettle with an erect robust stem, ovate cordate l., peltate and purple raspberry-like fr. in pendant bunches.

Larix dahurica japonica. (*M. D. G.* 1896, 28.) Coniferæ. H. A Larch with bluish-green l. [*L. kurilensis*, Mayr, may be the same as this.] Northern Japan.

Lasiopetalum Baueri. (*B. M.* t. 6445.) Sterculiaceæ. G. A free-flowering much-branched shr. L. opposite or whorled, 1–3 in. long, linear, obtuse. Fl. in axillary racemes, pearly white, about ½ in. in diam., tomentose outside. Australia.

Lasiosiphon anthylloides. (*G. C.* 1889, vi. 446; *B. M.* t. 7303.) Thymelaceæ. G. shr. with oblong l. and heads of soft yellow fl. Allied to *Gnidia*. South Africa.

Lastrea aristata variegata. (*Fl. and P.* 1879, 98; *Bull Cut.* 1879, 6, t. 8.) Filices. G. Only differs from the type in having a broad band of pale green running through the bases of the pinnules along the course of the rhachis. [*Aspidium aristatum*, Sw. var.] Japan.

Lastrea corusca. (*Bull Cut.* 1890, 7.) G. Fronds acutely triangular, tripinnate, of a dark shining green. Pinnæ with recurved tips, the lower ones deflexed. Pinnules narrow, elliptical or oblong, rounded at the apex, margin serrated. Japan.

Lastrea dilatata Brownii. (*Fl. and P.* 1882, 106.) H. A crested var. [*Nephrodium dilatatum*, Desv. var.] Azores.

—— Var. **dentigera.** (*G. C.* 1886, xxvi. 103.) H. A neat var. of dwarf habit, with slender lanceolate fronds 6–8 in. long; pinnules about 1 in. long, ovate, acute, cut into 2–4 lobes, which have 1–2 short teeth. Inverness, Scotland.

Lastrea hopeana. (*G. C.* 1882, xviii. 744; *Fl. and P.* 1883, 10.) S. An elegant fern, 1½–2 ft. high, with membranous ovate pinnate fronds; pinnæ sessile, lanceolate, caudate, pinnatisect; segments ligulate-falcate, entire; sori small, close to the midrib; rhachides slightly pubescent. [*Nephrodium hopeanum*, Baker.] Polynesia.

Lastrea Jenmani. (*Bull Cut.* 1887, 11.) S. Fern with stout erect scaly stipes and bipinnate fronds, about 2 ft. long by 9–12 in. broad, densely pellucid-dotted. [*Nephrodium Jenmani*, Baker.] Jamaica.

Lastrea lepida. (*G. C.* 1886, xxvi. 681.) S. An elegant fern, with ovate acuminate fronds, having alternate very shortly stalked lanceolate acuminate pinnatifid pinnæ, the central ones longest, glabrous, with hairy midribs and setose margins; sori placed near the midribs on each side, with inflated roundish-reniform lead-coloured hairy indusia. Stipes green, setose on the margin of the groove down the face. [*Nephrodium lepidum*, Baker.]

Lastrea Maximowiczii. (*G. C.* 1881, xv. 626.) H. evergreen fern, dwarf and dense-growing, with glossy green concave tripinnate fronds triangular-ovate in outline, acuminate; basal pinnæ larger than the others, very oblique. Pinnæ and pinnules densely set, striate on the upper surface. [*Nephrodium Maximowiczii*, Baker.] Japan.

Lastrea membranifolia. (*Williams' Cat.* 1880, 16.) S. fern with a short erect stem, with moderate-sized broadish-lobed pinnate fronds. The lower pair of pinnæ are pinnatifid. [*Nephrodium dissectum*, Desv. var. *membranifolium*.] Polynesia.

Lastrea montana coronans. (*Fl. and P.* 1882, 140.) H. This is a var. of *Nephrodium montanum* with finely crested fronds.

Lastrea prolifica. (*G. C.* 1882, xviii. 744; *Bull Cat.* 1883, 14; *Fl. and P.* 1883, 10.) H. evergreen fern, with deltoid bipinnate coriaceous deep green fronds: pinnæ distant, obliquely ovate-lanceolate: pinnules unequal in size and form, linear or falcate, cuneate or auricled at the base. Sori numerous in two lines on each side of the midrib, orange. [*Nephrodium erythrosorum*, Hook. var. *prolificum*.] Japan.

Lastrea Richardsii multifida. (*G. C.* 1881, xv. 104; *Fl. des S.* t. 2401–2; *Veitch Cat.* 1881, 9, 15.) S. A bold-habited fern, differing from the type

in having the tips of the fronds and pinnæ cut into numerous narrow-pointed spreading lobes. The fronds grow to a length of 3 ft. [*Nephrodium Richardsii*, Baker.] New Caledonia.

Latace Volkmanni. (*Gfl.* t. 1302, f. 1.) Liliaceæ. G. bulb with two narrow l., and an umbel of small white fl., tubular in the lower half; stamens three, with three sterile filaments alternating with them. Andes of Santa Rosa, Chile.

Lathræa clandestina. (*B. M.* t. 7106.) Scrophulariaceæ. H. per. differing from *L. Squamaria*, in its erect fl., longer upper-lip of corolla, and angled seeds. Fl. violet purple. Europe.

Lathyrus Davidii. (*Gfl.* t. 1127.) Leguminosæ. H. per. with pinnate l. ending in a tendril; leaflets 3–4. elliptic, acute, 1½–2 in. long, 1–1¼ in. broad. Racemes long-peduncled, few-flowered; fl. yellowish white; pods linear, 3–4 in. long. Japan; North China.

Lathyrus lætiflorus. (*G. C.* 1894, xv. 398.) H. H. A plant growing 6–8 ft. high, with nearly white or flesh-coloured fl.

Lathyrus pubescens. (*G. C.* 1895. xvii. 112; *R. H.* 1895, 40, f.) H. H. A climber with unequally pinnate l., which are downy like the stem. Fl. pale violet. in dense racemes. Hardy in the South of France. Uruguay.

Lathyrus Sibthorpi. (*W. G.* 1888, 326, 383.) H. A handsome plant with magenta-red fl. Greece.

Lathyrus splendens. (*Bull Cat.* 1881, 19; *B. M.* t. 7576.) H. H. or G. per. allied to the Everlasting Pea, but with larger and more abundant scarlet-purple fl. Lower California.

Lathyrus violaceus. (*G. C.* 1894, xv. 398.) H. H. 6–8 ft. high, with racemes of violet-blue fl. California.

Laurentia carnosula. (*B. M.* t. 6257.) Campanulaceæ. H. annual of *Lobelia*-like aspect. Branches diffusely spreading, ascending. L. opposite and alternate, linear-lanceolate, acute, entire or subserrate. Fl. axillary, in form and size resembling *Lobelia Erinus*, blue with 2 yellow white-bordered spots on lower lip. California.

Laurocerasus lancæfolia. (*R. H.* 1857, 470.) Rosaceæ. H. A form with slender fastigiate branches, and lanceolate-elliptic entire l., attenuate at base and apex. Garden var. raised from seed. [*Prunus Laurocerasus*, Linn. var.]

Laurocerasus Ottini. (*R. H.* 1877, 159.) H. A vigorous var. with large very dark green l., which are thick and leathery, attenuate at both ends, with their margin very shortly dentate. [*Prunus Laurocerasus*, Linn. var.]

Lavatara arborea variegata. (*Fl. and P.* 1882, 106.) Malvaceæ. H. An ornamental form, with variegated l.

Lavatera insularis. (*G. and F.* 1896. 164, f. 27.) H. H. A compact shrub 4 ft. through with palmately lobed l. on long petioles, and axillary solitary fl. 2 in. diam. coloured yellowish white and striped with purple. Mexico.

Layia elegans. (*R. H.* 1883, 384.) Compositæ. H. annual of dwarf habit. Stems much branched, reddish, pubescent. Lower l. pinnatifid; stem-l. narrow, lanceolate, subamplexicaul. Fl.-heads numerous, 1½ in. across; disk yellow; ray-florets yellow on the basal half, the apical half being white.

Layia glandulosa. (*B. M.* t. 6856.) H. annual, glandular-hairy throughout, branching from the base. L. alternate, linear, obtuse, 1–1½ in. long. Fl.-heads solitary, 1 in. in diam. with a small yellow disk and a broad white ray; the ray-florets are flat, broadly obovate, and 3-lobed at the apex. California.

Lecanopteris carnosa. (*K. B.* 1894, 398.) Filices. S. An epiphytic fern with a crust-like rhizome which spreads irregularly and is covered with projections. L. pinnate 6–12 in. long. It is allied to *Polypodium*. Penang.

Ledum glandulosum. (*M. D. G.* 1896, 19; *B. M.* t. 7610.) Ericaceæ. H This differs from *L. latifolium* and *L. palustre* in its larger ovate l., which are not woolly, but dotted underneath with impressed glands. Western North America.

Leea amabilis. (*Veitch Cat.* 1882, 19; *G. C.* 1882, xvii. 492, 493, f. 77; *Fl. and P.* 1882, 75.) Ampelidaceæ. S. foliage plant, with pinnate l. Leaflets in 2–3 pairs, with an odd one, elliptic-lanceolate, very acuminate, serrate;

upper surface of a rich velvety deep bronzy-green, with a broad white-toothed median stripe; under surface claret-red. Borneo.

Leea splendens. (*Ill. H.* 1884, t. 518.) S. A variety having the stems, petioles, midrib and under surface of the leaves coloured red.

Leontice darwasica. (*G. C.* 1888, iii. 200; *H. G.* 1888. 179.) Berberidaceæ. H. tuber with glaucous l., those on the stem trifoliolate; leaflets roundish or elliptic; fl. yellow, ¾–1 in. in diam. Bokhara.

Leopoldinia laucheana. (*G. C.* 1892, xi. 731.) Palmæ. S. Name only.

Lepariza encrosioides. (*G. C.* 1878, x. 170.) Amaryllidaceæ. S. bulb with 1–2 petioled oblong acute l., developed after the fl. Scape terete, 12–15 in. long; umbel 3–4-flowered; fl. drooping, about 1 in. long; tube ¼ in. long, green; segments red. Ecuador.

Lepidotrichum uechtritzianum. (*Gard.* 1896, 1. 238.) Cruciferæ. H. A prostrate widely-spreading herbaceous plant with white fl. Bulgaria.

Lepismium cavernosum. (*Gfl.* 1890, 151, f. 38.) Cactaceæ. G. succulent, something in the way of *L. commune*, but with flat (not 3-angled) toothed stems, the axils of the teeth having a large cavity filled with woolly hairs. South Brazil; Paraguay.

Lepismium dissimile. (*Gfl.* 1890, 148, f. 36–37.) G. succulent, with stout cylindric jointed stems, some of which are smooth, others being covered with tufts of setæ about ¼ in. long. South Brazil.

Leptactina Mannii. (*B. M.* t. 7367.) Rubiaceæ. S. A branched shr. 6 ft. high with oblong leathery green l., 5–8 in. long. Fl. in terminal clusters, white, with a slender corolla-tube 4 in. long and five spreading lobes 2½ in. long. Tropical West Africa.

Leptactina tetraloba. (*G. C.* 1885, xxiv. 391.) S. A small *Gardenia*-like shr. with oblanceolate l. 2½–7 in. long, ¾–1¾ in. broad, and solitary sessile terminal white fl. with a 4-lobed hypocrateriform corolla. East tropical Africa.

Leptospermum Annæ. (*Gfl.* t. 1184.) Myrtaceæ. G. A shr. with ascending slender branches. L. lanceolate, ½–¾ in. long, ascending. Fl. axillary and terminal, solitary or 2–3 together, small, white, with red stamens. Philippines.

Leptosyne gigantea. (*W. G.* 1895, 441, ff. 46–7; *Gfl.* 1895, 592, ff., 111–2.) Compositæ. H. H. A tall plant with finely divided l. and a soft-wooded stem 2–8 ft. in height. Fl.-heads resembling those of a small Sunflower. California.

Leptotes bicolor brevis. (*G. C.* 1892, xi. 42.) Orchidaceæ. G. A var. of *Tetramicra bicolor*, differing from the type in having shorter segments and a white lip.

Leschenaultia Baxteri major. (*R. H.* 1886, t. 468.) Goodeniaceæ. G. A dwarf much branched free-flowering shr. with close-set linear l., and numerous dark orange-red pendulous fl., on peduncles about ¾ in. long. The corolla is two-lipped, with unequal divisions, three petals being much larger than the other two and notched at their tips. [*L. formosa*, R. Br., var.] Australia.

Lespedeza capillipes. (*R. H.* 1890, 226.) Leguminosæ. H. China.

Lespedeza Delavayi. (*R. H.* 1890, 225, f. 70.) H. per. of bushy habit, 3–6 ft. high. L. trifoliolate; leaflets elliptic, obtuse, green above, silvery beneath. Fl. in a large terminal panicle, deep violet passing into purple-black. Yunnan, China.

Lespedeza eriocarpa polyantha. (*R. H.* 1890, 227.) H. China.

Lespedeza hirtella. (*R. H.* 1890, 226.) H. China.

Lespedeza macrocarpa. (*R. H.* 1883, 14.) H. shr. with trifoliate l. and racemes of numerous small purple fl. North China.

Lespedeza trigonoclada. (*R. H.* 1890, 226.) H. per. A remarkable species with triangular stems, elongate glabrous coriaceous l. and terminal panicles of pale yellow or whitish fl. Gorges of Hee-chan-men, South China.

Lespedeza yunnanensis. (*R. H.* 1890, 226.) H. China.

Leucocoryne purpurea. (*Gard.* 1894, xlvi. 144.) Liliaceæ. H. A bulb with grassy l., and scapes bearing 2–8 lavender and crimson-maroon fl. Chile.

Leucojum hyemale. (*B. M.* t. 6711.) Amaryllidaceæ. H. bulb, flowering in spring. L. 2–4, narrow-linear. contemporary with the fl. Scape 1–2-flowered; fl. nodding, ¾ in. in diam., white; anthers connivent, yellow. Maritime Alps.

Leucojum roseum longifolium. (*Gfl.* 1886, 116.) H. Differing from the type in its longer l., larger fl. and more floriferous habit. Corsica.

Leucophyllum texanum. (*G. and F.* 1890, 488, f. 63.) Scrophulariaceæ. G. A branching shr. with obovate nearly sessile silvery l., and tubular axillary showy violet-purple fl., 1 in. or more across. Mexico.

Leucopogon verticillatus. (*B. M.* t. 6366.) Epacridaceæ. G. L. lanceolate, acuminate, sessile, pale green, in whorls of 5–8. Fl. small, pale rose, in small dense axillary spikes. South-west Australia.

Leucothoe Davisiæ. (*B. M.* t. 6247.) Ericaceæ. The correct name for the plant distributed as *L. Lobbii*. California.

Libertia paniculata. (*B. M.* t. 6263.) Iridaceæ. G. per., elegant and free-flowering. L. distichous, linear, growing to 1 ft. long, ¼ in. broad. Scape 1–2 ft. high, terminating in a panicle of sub-umbellately disposed white fl., ¾ in. in diam.: perianth-segments horizontal, oblong, obtuse. Stamens 3, united in a tube at the base, surrounding the style, which has 3 horizontal arms protruding from between the stamens. South-east Australia.

Libocedrus decurrens aureo-variegata. (*M. D. G.* 1896, 53.) Coniferæ. H. A form with persistently golden variegated l.

Licuala grandis. (*Ill. H.* 1881, t. 412: *Lind. Cat.* 1881, 4.) Palmæ. [This is the correct name for *Pritchardia grandis*, Hort.]

Licuala kirsteniana. (*Ill. H.* 1895, 189.) S. A pretty palm with deeply-cut l. Madagascar.

Lietzia brasiliensis. (*Gfl.* t. 1005.) Gesneraceæ. S. tuberous-rooted per. Stem erect, villous. Lip elliptic-lanceolate or lanceolate, crenate, dark green, papillose-hairy above. Raceme many-flowered. Fl. solitary in each axil, pedicelled, green, spotted with purple brown. Corolla with two large dorsal gibbosities at the base; the mouth very oblique and widely gaping. Brazil.

Lievena princeps. (*Gfl.* t. 1024.) Bromeliaceæ. S. [*Quesnelia rufa* Gaud.] Brazil.

Ligustrina pekinensis. (*R. H.* 1886 398.) Oleaceæ. H. shr. or small tree, very bushy, with slender velvety dark red branchlets, and opposite deciduous l., with the petiole and midrib blackish-purple. [*Syringa pekinensis*, Rupr.] North China.

Ligustrum japonicum Alivoni (*R. H.* 1886, 537.) Oleaceæ. H. A robust shr. with ovate-lanceolate acuminate entire l. narrowed at the base, wavy at the margin, of a dark shining green, irregularly variegated with pale yellow. Garden variety.

Ligustrum massalongianum. (*G. C.* 1881, xvi. 149, f. 33.) H. H. evergreen shr., with ascending warted branches, pilose when young. L. linear-lanceolate, acuminate, shortly petiolate, glabrous. Fl. white, in dense terminal panicles. Khasia.

Ligustrum medium. (*Nat. Arb. Zosch.* 1891, 15.) H. shr. or small tree with broadly lanceolate acute l. and terminal panicles of small white fl. Japan.

Ligustrum ovalifolium instabile. (*R. H.* 1878, 176.) H. var. with the l. alternate, opposite or in whorls of three.

Ligustrum sinense nanum. (*R. H.* 1875, 20.) H. A dwarf form, very much branched and compact, with closely set oval undulated l. and abundant bunches of small odorous fl.

Ligustrum villosum. (*R. H.* 1878, 149.) H. shr., tomentose on the buds and young shoots. L. long, narrowly rounded at the apex, thick, entire, and shining. Fl. very numerous, in depressed or corymbiform bunches, white. Cultivated under the name of *L. Ibota*.

Lilium alpinum. (*Gfl.* 1890, 478.) Liliaceæ. H. [*L. parvum*, Kellogg.]

Lilium auratum macranthum. (*Gfl.* 1889, 463, 496.) H. A colour variety.

—— Var. **pictum.** (*Gfl.* 1889, 463, 496.) H. A colour variety.

—— Var. **platyphyllum.** (*G. C.* 1880, xiv. 198.) H. A var. resembling the type, but dwarfer, with broader l. and with perianth-segments less copiously spotted with purple-brown.

—— Var. **rubrovittatum.** (*Gfl.* 1889, 463, 496.) H. A colour variety.

—— Var. **tricolor.** (*G. C.* 1880, xiv. 198.) H. A var. of robust habit, with broad sub-erect l. and very large fl. without any purple-brown dots. Japan.

Lilium Beerensi. (*Gard.* 1895, xlviii. 11.) H. A garden hybrid between *L. chalcedonicum* and *L. excelsum*.

Lilium Biondii. (*B. T. O.* 1896, 1.) H. A scarlet-flowered species with linear l. Nearly allied to, or perhaps identical with, *L. sutchuenense*. China.

Lilium bloomerianum ocellatum. (*Bull Cat.* 1876, 10.) H. Fl. large, rich tawny orange, spotted nearly to the tips with large spots, the upper and larger of which are crimson with a black centre. [*L. Humboldtii*, Roezl & Leichtl. var.]

Lilium Bolanderi. (*Gfl.* 1889, 384.) H. bulb. with a purplish stem and ovate bluish-green l. Fl. bell-shaped, with lanceolate segments of a purple-red colour, dotted with blood red inside. California.

Lilium Brownii leucanthum. (*G. C.* 1894, xvi. 183.) H. A distinct var., the flowers not being tinged with brown outside and marked with yellow inside; the tube is less distinctly trumpet-shaped and the l. are broader than in the type. Western China.

—— Var. **viridulum.** (*G. C.* 1885, xxiv. 134.) H. This differs from the type in its broader and shorter l. and creamy white fl. tinged on the outside with yellowish green, having only a faint dash of claret-brown. Japan.

Lilium chinense. (*B. T. O.* 1896, 176, vi. 2.) H. A scarlet-flowered lily with linear l. Nearly allied to *L. sutchuenense*. China.

Lilium colchicum. (*R. H.* 1880, 120.) H. Stem 16–24 in. high. L. sessile, acuminate, glabrous above, shortly villous beneath. Fl. solitary, white, dotted with red-brown, the outside being of a violet-brown tint. [*L. monadelphum*, Bieb.]

Lilium concolor luteum. (*Gfl.* t. 885.) H. Differs from the type in its linear-lanceolate 3-nerved l.: pet. obtuse and sub-emarginate, yellow, spotted within with purple-red. China: Japan.

Lilium croceo-elegans. (*G. C.* 1893, xiv. 8.) H. A hybrid between *L. croceum* and *L. elegans*.

Lilium dalhansoni. (*Gard.* 1893, xliv. 260.) H. A hybrid between *L. Martagon dalmaticum* and *L. Hansoni*.

Lilium elegans Batemanniæ. (*Gfl.* 1889, 497.) H. A tall form with 3–12 dark yellow fl. Japan.

—— Var. **citrinum.** (*Fl. des S.* t. 2319.) H. A pretty variety, with stem 2-2½ ft. high, lanceolate l. and orange yellow unspotted fl. Japan.

—— Var. **robustum.** (*Fl and P.* 1882, 106.) H. A robust var. with large deep orange fl. covered with small dark brown spots.

—— Var. **Wallacei.** (*Gfl.* 1889, 497.) A dwarf form, usually one-flowered; fl. spotted with brown: bulbs stoloniferous. Japan.

Lilium Elisabethæ. (*W. G.* 1891, 198.) [*L. japonicum*, Thunb.] Japan.

Lilium Grayi. (*G. and F.* 1888, 19, f. 4; *B. M.* t. 7234.) H. Allied to *L. canadense*, but with smaller and less drooping fl., with broader segments that are not recurved. L. 4–8 in a whorl, lanceolate, acute, not at all scabrous. Fl. often solitary, ascending or somewhat nodding, sub-campanulate, 1½–2 in. long; the segments oblanceolate, abruptly acute, not recurved, deep reddish orange, spotted within. Alleghany Mountains.

Lilium Harrisii. (*R. H.* 1883, 211, f. 40.) This is a form of *L. longiflorum*.

Lilium Henryi. (*G. C.* 1888, iv. 660; *B. M.* t. 7177.) A fine lily, 2–6 ft. high, with close-set lanceolate l. 6–8 in. long, and a large lax corymb of

4–8 fl. 3–3½ in. long, yellow, dotted in the lower part with red-brown. Ichang, China.

Lilium japonicum Alexandræ. (*G. C.* 1893, xiv. 86, 243, f. 44.) H. A var. which differs from the type in its broader l., more open pure white fl. and longer style. [Syn. *L. Ukeyuri*, Hort. and *L. Alexandræ*, Hort.] Japan.

Lilium longiflorum Chloraster. (*G. C.* 1891, x. 66, 225.) H. A well marked var. of *L. longiflorum*; fl. resembling those of *L. Brownii*; pollen red-brown. Central China.

—— Var. **formosanum.** (*G. C.* 1880, xiv. 524; *Veitch Cat.* 1881, 10, 16.) H. H. A var. with more numerous narrower three-nerved l. Fl. 5–7 in. long, white; the segments keeled with red outside. Formosa.

Lilium Lowii. (*G. and F.* 1891, 352; *B. M.* t. 7232.) G. Closely related to *L. nepalense* but having smaller l. and white fl. with a few purple blotches. North India.

Lilium lucidum. (*G. C.* 1878, x. 623.) H. Allied to *L. canadense*, of which it has been considered a var. Bulb spheroid or slightly depressed; scales thickened, lanceolate, acute, very closely adpressed. Stem central, 2–3 ft. high. L. whorled, scattered below and above, lanceolate or ovate-lanceolate, 3–4 in. long, 1–1¼ in. wide. Fl. 1–6, terminal, nodding, 1½ in. in expanse, light translucent yellow-orange, spotted with dark purple; perianth-segments lanceolate, strongly revolute; style and stamens about equal, exserted. Oregon and Washington.

Lilium maritimum. (*G. C.* 1878, x. 622.) H. In the way of *L. canadense* with glabrous alternate or rarely verticillate narrow oblong lanceolate and obtuse l. chiefly clustered near base of stem. Fl. 1–3, terminal, small, orange-brown, spotted with dark purple inside, on elongated peduncles; perianth-segments lanceolate, equal, slightly revolute; style short; stamens included. California.

Lilium Martagon album. (*G. C.* 1889, v. 809.) H. A white flowered form of the well-known Turk's-cap Lily.

—— Var. **atrosanguineum.** (*B. T. C.* 1889, 40, t. 2.) H. A form with dark purple fl. Europe.

Lilium Martagon villosum. (*B. T. C.* 1893, 70.) H. A form differing from the type by its larger l., deeper coloured fl., and by the long white hairs which clothe the unopened buds. The fl. are produced about a fortnight after those of the type. North Italy.

Lilium Martagon × Hansoni. (*G. C.* 1891, x. 94.) H. A hybrid between the two species named.

Lilium nitidum. (*G. C.* 1880, xiv. 198.) Panicle deltoid, of 18–20 fl. Perianth bright yellow, 1½ in. long. Segments lanceolate, furnished with copious small red-brown dots. California.

Lilium pardalinum pumilum. (*Gn.* 1889, 410.) H. A garden hybrid between *L. pardalinum* and *L. parvum*.

—— Var. **luteum.** (*G. C.* 1889, vi. 52.) H. A var. with the fl. coloured Indian-yellow and spotted with brown.

—— Var. **Warei.** (*Gn.* 1886, 52.) H. A form with shorter and more cordate l. and smaller fl., varying from lemon to orange-yellow, without the brown spots characteristic of the type. Lower California.

Lilium primulinum. (*B. M.* t. 7227.) G. or H. H. Allied to *L. nepalense*, which it resembles in growth and foliage but the fl. are pale yellow tinged with green outside and are produced in a terminal umbel. Upper Burma.

Lilium speciosum gloriosoides. (*G. C.* 1880, xiv. 198.) H. Differs from the other varieties of *L. speciosum* by its narrow l., much-reflexed crisped perianth-segments and the scarlet rather than crimson spots and papillæ. China.

Lilium sulphureum. (*B. M.* t. 7257.) G. or H. H. This is the correct name for the plant cultivated under the names of *L. wallichianum superbum* and *L. ochroleucum*.

Lilium szechnense. (*G. C.* 1896, xix. 372.) A species with large bright red fl. allied to *L. Maximowiczii*. [*L. sutchuenense*, Franch.] South China.

Lilium tigrinum jucundum. (*Bull Cut.* 1876, 10.) H. A var. with light cinnabar-red fl. marked in the lower half by scattered black dots, furrowed and papillate towards the base. Filaments and style orange; anthers chocolate-red. Japan.

Lilium Wallichianum superbum. (*Gfl.* 1889, 554; *G. C.* 1889, v. 809.) G. L. linear or lanceolate, bulbiliferous in their axils; fl. large, funnel-shaped, of a light yellow, shaded with purple-rose at the apex of the segments. [*L. sulphureum*, Baker.] Himalaya.

Limatodes labrosa. (*G. C.* 1879, xi. 202.) Orchidaceæ. S. Long pseudobulbs jointed in the middle; raceme hairy. rather loose; bracts membranous, oblong, acute. half as long as the hairy pedicelled ovaries; sep. ligulate, acute. light yellowish brown, tinted with purple inside; pet. broader, purple inside; lip angular, spurred, with a cuneate base and a much-dilated wavy blade, cucullate around the short column; apex retuse, light purple in the throat, covered with small dark purple spots. [*Calanthe labrosa*, Reichb. f.] Burma.

Linaria aparinoides aureo-purpurea. (*Gfl.* t. 1116, f. 2.) Scrophulariaceæ. H. annual with linear l. and short racemes of crimson-purple fl. with a yellow palate. South Europe.

Linaria linogrisea purpurea. (*Gfl.* t. 898.) H. var. with larger fl., purple with a yellow palate. Marocco?

Linaria maroccana hybrida. (*Fl. and P.* 1882, 26.) H. annual with fl. that vary from rose to red and from lilac to violet, the lower pet. being usually white.

Linaria multipunctata erecta. (*R. H.* 1889, 328.) H. Garden variety.

Linaria pilosa longicalcarata. (*Gfl.* t. 1135, f. 3.) H. rockwork plant of neat habit, differing from the type in its shorter stems and longer spur.

Lindelofia longifolia. (*W. G.* 1888, 326.) Boraginaceæ. H. per. herb, 2–2½ ft. high with lanceolate l. and scorpioid cymes of bright blue Forget-me-not-like fl. [Perhaps an error for *L. spectabilis*, Lehm., which is the *Cynoglossum longiflorum*, Royle, figured in the *Botanical Register*, 1840, 50.]

Lindenia vitiensis. (*G. C.* 1883, xix. 693.) Rubiaceæ. S. shr. with lanceolate l. and large tubular fragrant fl. New Caledonia.

Lindneria fibrillosa. (*G. C.* 1890, viii. 240.) Liliaceæ. S. Bulb large, crowned with bristles: l. fleshy, lanceolate, 1 ft. long; peduncle erect, bearing a raceme of numerous greenish gamophyllous fl., 1½ in. long. [*Pseudogaltonia Pechuelii*, O. Kunze.] Damaraland.

Linospadix Micholitzii. (*G. C.* 1895, xviii. 262; *Sand. Cat.* 1896, 50.) Palmæ. S. It is unique in the genus in being quite stemless, the wedge-shaped l. rising erect from the ground in a large tuft. They are upwards of four feet long, narrow at the base, broadening upwards, ending in a pair of long acute points. New Guinea.

Liparis decursiva. (*G. C.* 1888, xxii. 38.) Orchidaceæ. S. A species with thick pseudobulbs and decurrent bases to the cuneate oblong l.; peduncle narrowly winged; fl. green, darker on each side of the whitish mid-line of the lip. India.

Liparis elegans. (*G. C.* 1886, xxvi. 558). S. Pseudobulbs ovate, 1–3-leaved. L. 3–8 in. long, lanceolate-linear, acute. Fl.-stem 1–1½ ft. high, bearing a many-flowered raceme of pale greenish fl. with an orange-red lip. Penang.

Liparis formosana. (*G. C.* 1880, xiii. 394.) S. In the way of *L. bituberculata* but with oblong acute plaited l. and a sagittate acute lip with two teeth at the base: colour dark brown with green borders. Sep. and pet. light purple with green borders. Formosa.

Liparis fulgens. (*G. C.* 1889. vi. 620.) S. A pretty little plant with bright red fl. Supposed to have come from the Philippine Islands.

Liparis grossa. (*G. C.* 1883. xix. 110.) S. An unattractive species, with broad obtuse l. and small brownish yellow fl. Burma.

Liparis latifolia. (*G. C.* 1885, xxiii. 532.) S. Pseudobulbs compressed, pear-shaped, furrowed. L. solitary, cuneate-oblong, acute. Fl. light ochre-coloured, arranged in a long raceme. Java.

Liparis minutiflora. (*G. C.* 1888, iii. 75.) S. An unattractive species of tufted habit, with pseudobulbs 1½ in. long, l. 3–6 in. long and racemes of minute pale green fl. [*L. longipes*, Lindl. var. *spathulata*, Hort.] India.

Liparis stricklandiana. (*G. C.* 1880, xiii. 232.) S. L. ligulate, acute, apple-green. Peduncle two-edged, bearing a dense raceme of greenish fl. Assam.

Liparis tricallosa. (*G. C.* 1879, xi. 684.) S. Plant 1 ft. high with elongate compressed tetragonous pseudobulbs, and soft plaited cuneate-oblong acute l. Sep. linear, greenish yellow. Pet. filiform, yellow or purple; lip rather large with a very short claw, and a rather orbicular or hastate semi-oblong acute serrulate blade, yellowish green changing to dull purple, with dark veins and two blackish purple calli on the very base. Borneo.

Lippia bracteata. (*R. H.* 1881, 380.) Verbenaceæ. G. free-flowering shr. with large opposite ovate acuminate l. scabrous above, tomentose beneath and subglobose heads of dull red fl. subtended by violet bracts.

Lissochilus dilectus. (*G. C.* 1886, xxv. 456.) Orchidaceæ. S. terrestrial orchid with branched hand-like tubers, broad l. and a peduncle 2–3 ft. high, bearing 4–10 large rosy fl. with a purple lip. Sep. linear-lanceolate, acuminate, reflexed: pet. oblong, very broad; lip three-lobed with broad side lobes and a nearly square retuse front lobe. Congo.

Lissochilus giganteus. (*G. C.* 1888, iii. 616–7, f. 83; iv. 353.) S. The correct name for *Eulophia gigantea*, which see.

Lissochilus Græfei. (*G. C.* 1892, xi. 749.) S. In the way of *L. Krebsii*. It has lanceolate plicate l. and a scape 4 ft. high, bearing about 20 fl. coloured green, brown and yellow.

Lissochilus graniticus. (*B. T. C.* 1894, 229.) S. A handsome terrestrial orchid with large l. and tall spikes of golden yellow and violet fl. Abyssinia.

Lissochilus Krebsii purpurata. (*G. C.* 1885, xxiv. 102; *W. O. A.* under t. 204.) S. terrestrial orchid. Tubers conical: l. thin, broadly lanceolate, acute, plicate, 1 ft. long. Scape 3½ ft. high. Fl. 2 in. in diam. Sep. dark green outside, maroon-purple inside, margins revolute; pet. ovate, bright yellow above, pale cream-coloured and faintly veined with red beneath. Lip dull orange-yellow, with chocolate-purple side lobes, streaked with darker lines. South Africa.

Lissochilus Sandersoni. (*G. C.* 1885, xxiv. 17; *B. M.* t. 6858.) S. terrestrial orchid with lanceolate plaited l. 3–4 ft. long and a fl.-stem 5–6 ft. high. Fl. 2 in. in diam.; sep. greenish; pet. large, roundish, white; lip greenish at the base with a mauve-purple front lobe; crests well developed, greenish or purplish towards the apex. Natal.

Lissochilus stylites. (*G. C.* 1885, xxiii. 786.) S. A handsome species, with triangular acuminate reflexed sep., oblong broad pet. and a large nearly square lip having a short conical bent spur and two styliform processes in the mouth. Fl. rose-coloured with dark spots at the base of the lip. Comoro Isles.

Listrostachys Sedeni. (*G. C.* 1878, ix. 138.) S. epiphyte much like *L. arcuatum* (*Angræcum arcuatum*) but with longer and broader obliquely tridentate l.; the fl. has a straight spur and no lateral teeth to the lip. East Tropical Africa.

Listrostachys ringens. (*G. C.* 1878, x. 266.) S. epiphyte of dwarf habit, with cuneate-oblong bi-lobed l. and racemose yellowish white fl. Sep. and pet. triangular, recurved: lip lanceolate, with a blunt angle on each side before the mouth of the spur; spur wide, cylindrical, blunt, 1½ in. long. Cameroons.

Litobrochia comans densa. (*Bull Cat.* 1880, 5.) Filices. S. A handsome fern. The fronds spread round an erect caudex. New Caledonia.

Litobrochia robusta. (*Cat. Comp. Cont. d'Hort.* 1886, 10.) S. fern, with tripartite fronds of a bright clear green with slightly undulated pinnules.

Littonia modesta Keitii. (*Gfl.* t. 1237.) Liliaceæ. G. bulb. A more robust form than usual. South Africa.

Livistona enervis. (*W. G.* 1891, 346.) Palmæ. S. An ornamental palm with deeply divided fan-shaped l., the segments of which are only ½ in. broad and very delicate in texture. [*L. inermis*, R. Br.?]

Loasa prostrata. (*B. M.* t. 6442.) Loasaceæ. H. prostrate herb clothed with stinging hairs, with opposite petiolate and sessile irregularly 3–5-lobed l., and small pedunculate yellow fl. with a red corona. Chilian Andes.

Loasa vulcanica. (*Ill. H.* 1878, t. 302; *B. M.* t. 6410.) H. erect branching annual, with alternate l.; the

upper ones lanceolate, the others tripartite with lanceolate segments: the two lateral ones often with a small basal lobe, all unequally serrate. Fl. solitary in the upper axils, nodding, 1 in. in diam.; pet. white, ovate-cucullate, with a tooth on each side near the base. Corona erect, connate into a conical tube, yellowish, with two red belts, the lower of which is regularly indented on its lower margin by the yellow. Ecuador.

Loasa Wallisi. (*Gfl.* t. 958.) H. herb, in the way of *L. vulcanica*; handsome and free-flowering. L. petiolate, ternately partite, irregularly lobed and toothed. Fl. racemose, 1 in. in diam.; pet. boat-shaped, white: coronal segments with a blunt tooth on each side at the middle, up to which they are yellow, above the teeth red with two white bands. [*L. vulcanica*, André.] Andes of Colombia.

Lobelia Dortmannii. (*W. G.* 1894, 459, f. 72.) Campanulaceæ. G. Apparently a form of *L. Erinus*.

Lobelia Gerardi. (*R. H.* 1893, 519.) H. A garden hybrid between *L. cardinalis* and *L. syphilitica*.

Lobelia Kerneri. (*Gfl.* 1889, 302; *H. G.* 1889, 365.) G. per., with broad lanceolate toothed l. in a rosette and similar l. along the stem, the upper part of which is covered with violet-purple fl. Costa Rica.

Lomaria Dalgairnsiæ. (*Bull Cut.* 1877, 6, f. 1.) Filices. G. tree-fern with blackish trunk, shaggy at apex, with long subulate dark brown scales. Fronds sub-coriaceous, lanceolate, pinnate: pinnæ lanceolate, acute, the terminal ones confluent, dark green above, pale beneath. South Africa.

Lomaria discolor bipinnatifida. (*Bull Cut.* 1878, 7; *G. C.* 1877, viii. 488.) G. A var. with bipinnatifid fronds: both primary and secondary segments blunt, oblong, crowded: the segments of the abortive fertile fronds pectinately pinnatifid. Australia.

Lomaria gigantea. (*Ill. H.* 1876, t. 237; *Lind. Cat.* 1876, 7.) G. evergreen tree-fern with short massive trunk bearing a crown of lanceolate pinnate fronds 3 ft. long or longer; pinnæ lanceolate, acute, light green; stipes black. Fertile fronds longer and narrower with linear pinnæ. [*L. attenuata*, Willd., var. *gigantea*.] South Africa and Pacific Islands.

Lonchocarpus Barteri. (*B. M.* t. 6943; *G. C.* 1886, xxvi. 785.) Leguminosæ. S. A handsome climber with pinnate l. having 5–7 elliptic-oblong acuminate leaflets, 4–7 in. long, and elegant paniculate racemes of clustered pink fl. with reddish-brown calices. Tropical Africa.

Lonicera Alberti. (*Gfl.* t. 1065; *G. C.* 1882, xvii. 256; *B. M.* t. 7394.) Caprifoliaceæ. H. A dwarf glabrous shr., with slender dependent branches, linear-oblong l. entire or with two teeth at each side of the base, and rosy-lilac fl. Corolla nearly regular, 5-parted. Turkestan.

Lonicera bella. (*Gfl.* 1889, 525.) Garden hybrid between *L. Morrowi* and *L. tatarica*.

Lonicera flavescens. (*Gfl.* 1888, 7, f. 1.) H. shr. with petiolate lanceolate acuminate l. Bracts ovate, acute; bracteoles connate, covering the base of the corolla. Fl. varying from sulphur-yellow to citron-yellow, glandular-hairy; segments of corolla nearly regular. [Syn. *L. webbiana*, Hort.] British Columbia.

Lonicera floribunda. (*Gfl.* 1889, 525.) H. shr., with small grey-green ovate l. Fl. very numerous, lateral, on short twigs, pale rose-coloured, about ⅔ in. long. [*L. Korolkowii*, Stapf.] Turkestan.

Lonicera gibbiflora. (*Nat. Arb. Zösch.* 1889–1890, 8.) H. shr. A hybrid between *L. chrysantha* and *L. ruprechtiana*.

Lonicera gigantea. (*R. H.* 1882, 558.) H. Floriferous shr. with large dark green amplexicaul l., the floral ones connate. Fl. yellow, tubular, arranged in a large terminal panicle.

Lonicera hildebrandiana. (*G. C.* 1893, xiv. 743.) G. A conspicuous shr., with large dark glossy l. and fine crimson fl. 7 in. long. Upper Burma.

Lonicera hirsuta × Sullivantii. (*G. and F.* 1896, 345, f. 46.) H. A garden hybrid.

Lonicera hispida. (*Gfl.* t. 1100.) H. shr. with erect stem; branches hispid; l. oblong, acute, ciliate, shortly petiolate; fl. in pairs, pendulous, 1 in. long; bracts large, ovate; berries distinct. Himalaya, &c.

Lonicera Kesselringi. (*Acta Hort. Petrop.* 1890, xi. 310.) H. shr. allied to *L. nigra*, dwarf and much branched. L. lanceolate or elliptic-lanceolate, acute, pale beneath. Fl. in pairs, axillary, red outside, white variegated with red inside, bearded in the throat of the tube, which is not gibbous at the base. Kamtschatka.

Lonicera Korolkowii. (*G. and F.* 1894, vii. 34, f. 4.) H. A free-flowering bush Honeysuckle allied to *L. Xylosteum*. Fl. yellowish-white: fruit orange red.

Lonicera Maacki. (*Gfl.* t. 1162: *Fl. and P.* 1884, 157.) H. shr. with oblong acute l. and axillary sub-sessile white fl. Corolla ¾ in. long, bilabiate: the lower lip shortly 4-lobed. Mandshuria.

Lonicera micrantha. (*Gfl.* 1889, 524.) H. A tall bush with lanceolate-ovate to obovate l., nearly glabrous or slightly hairy. Fl. small, pale pink, becoming yellowish after flowering. Berries small, red. [Syn. *L. tatarica*, Linn. var. *micrantha*.]

Lonicera minutiflora. (*Gfl.* 1889, 523.) Garden hybrid between *L. micrantha* and *L. Maackii*.

Lonicera misera. (*Gfl.* 1889, 523.) Garden hybrid between *L. micrantha* and *L. Xylosteum*.

Lonicera muendeniensis. (*Gfl.* 1893, 102, f. 18, 4–6.) H. A garden hybrid between *L. bella* and *L. gibbiflora*.

Lonicera muscaviensis. (*Gfl.* 1893, 100, f. 18, 1–3.) H. A hybrid between *L. Morrowi* and *L. ruprechtiana*.

Lonicera notha, and var. **alba, carneorosea, gilva, grandiflora,** and **ochroleuca.** (*Gfl.* 1889, 525.) Garden hybrids between *L. ruprechtiana* and *L. tatarica*.

Lonicera permixta. (*Gfl.* 1889, 523.) Garden hybrid between *L. micrantha* and *L. tatarica*.

Lonicera propinqua. (*Gfl.* 1889, 580.) A garden hybrid between *L. alpigena* *L. Ledebourii*.

Lonicera quinquelocularis. (*Gfl.* 1889, 492.) H. shr. with elliptic or ovate l. pubescent beneath, ciliate on the margin; pedicels very short or almost none; fl. of moderate size, yellowish: berries white. Himalaya.

Lonicera salicifolia. (*Gfl.* 1889, 524.) Garden hybrid between *L. micrantha* and *L. ruprechtiana*.

Lonicera segreziensis. (*Gfl.* 1889, 493.) The corrected name for *L. diversifolia* of gardens.

Lonicera splendens. (*G. and F.* 1889, 268.) One of the numerous forms of *L. tatarica*.

Lonicera splendida. (*Gfl.* 1890, 65, f. 13.) H. shr. belonging to the *Caprifolium* group, with connate oblong or obovate-oblong obtuse l., and terminal heads of yellowish white fl. about 1½ in. long. [Syn. *Caprifolium splendidum*, Hort.] Spain.

Lonicera syringantha. (*Gfl.* 1892, 564, f. 115–6.) H. shr. with pairs of small oblong obtuse l. and axillary pale pink fl. about ½ in. long. North China.

Lonicera tangutica. (*Gfl.* 1891, 580.) H. shr. with oblong or obovate-oblong l. glaucous beneath and pairs of small yellowish fl. on long slender peduncles, succeeded by globose red berries. Kansuh, North China.

Lonicera tatarica grandibracteata. (*Gfl.* 1891, 486, f. 90.) H. shr. A seedling var. with large leafy bracts.

Lonicera tomentella. (*B. M.* t. 6486.) H. shr. 10–12 ft. high. L. opposite, very shortly petioled, ovate-oblong, downy beneath. Fl. two from each axil, pendulous, ½ in. long, white tinged with pink. Sikkim Himalaya.

Lonicera translucens. (*Gfl.* 1889, 493.) H. shr. with ovate acute l. rounded or slightly cordate at the base: the fl. are like those of *L. quinquelocularis*, but slightly larger and of a darker yellow colour. Himalaya.

Lonicera webbiana. (*Gfl.* 1888, 7, 8, f. 2.) H. shr. very like *L. alpigena*, and perhaps only a form of that species. L. large, oblong or elliptic-oblong, somewhat abruptly pointed. Corolla 2-lipped, yellowish-green, suffused outside with brownish red. Himalaya.

Lonicera Zabelii. (*Gfl.* 1893, 104, f. 19, 1–3.) H. A garden hybrid between *L. floribunda* and *L. tatarica*,

Lopezia grandiflora. (*R. H.* 1879. 50.) Onagraceæ. H. H. A beautiful strong-growing herb with stalked broadly-lanceolate toothed l. 3–4 in. long and 1½–2 in. broad. Infl. grouped at the top of the stems. Fl. on pedicels 1 in. long; ovary globose, green; calyx and corolla both coloured carmine-rose, about 1 in. long. Mexico.

Loranthus flavidus. (*Gn.* 1885, 342.) Loranthaceæ. An interesting parasite of the Mistletoe family, which may be grown by sowing the berries upon the above-ground roots of the Beech tree. A small shr., with opposite petiolate oblong l. about 1½ in. long, obtuse and thick. Fl. from the previous year's growth in small racemes: perianth yellowish, ½ in. long, with a slender tube and four narrow reflexed segments. New Zealand.

Loropetalum chinense. (*G. C.* 1881. xiv. 620.) Hamamelidaceæ. H. H. shr. of compact habit, about 4–5 ft. high. L. oblique, elliptic or elliptic-oblong, acute, 1½–2 in. long. Fl. white, in small heads terminating the shoots: pet. long, linear. China.

Lotus peliorhynchus. (*B. M.* t. 6733: *R. H.* 1884, 384; *Fl. and P.* 1884, 28.) Leguminosæ. G. shr. with rather crowded sessile l.; leaflets subulate, spreading as if fascicled. Fl. loosely crowded on short shoots towards the ends of the branches; corolla scarlet, 1 in. long, with a very narrow lanceolate standard, which is sharply recurved like a hood. [*L. Bertholetii*, Masf.] Teneriffe.

Lourya campanulata. (*R. H.* 1889, 128, f. 32; *B. M.* t. 7482.) Liliaceæ. S. per. very similar to *Aspidistra* in foliage and habit. Fl. in dense heads at the base of the l. close to the ground, campanulate, yellowish white, with a black disk-like mark at the base inside. Cochinchina.

Lowia longiflora. (*G. C.* 1896, xx. 652. f. 111.) Scitamineæ. S. A stemless plant with tufted l. 3 ft. long, and one-flowered scapes 1 ft. long. Fl. 6 in. across, composed of three linear-lanceolate spreading olive-coloured sep. and two smaller linear purplish pet. tufted at the apex; the third pet. being larger, lanceolate, lip-like and pure white. Perak.

Lowia maxillarioides. (*B. M.* t. 7351.) S. A Ginger-like plant with tufted distichous lanceolate l. 9 in. long and loose short panicles of fl. in which the three large purple sep. and the odd green lip-like pet. are suggestive of an Orchid. Malay Peninsula.

Loxococcus rupicola. (*B. M.* t. 6358.) Palmæ. S. palm, growing 30–40 ft. high. Trunk rather stout, swollen at base, smooth. L. pinnate, 5–6 ft. long, 3–4 ft. broad; petiole 1½ ft. long, stout; pinnæ in 12 20 pairs, linear, obliquely truncate and notched at the base, recurving. Spathe 1 ft. long, narrowly boat-shaped, leathery. Spadix from the trunk below the l. 1 ft. long, branched, dark blood-red. Ceylon.

Ludovia crenifolia. (*G. C.* 1893, xiii. 442, f. 64.) Cyclanthaceæ. S. A large plant of tufted habit: the l. sheathing at the base and set in two ranks, thick, leathery, plicate, lanceolate, narrowed to a stalk-like base. Brazil.

Lueddemannia triloba. (*K. B.* 1895, 283; *G. C.* 1895, xviii. 588.) Orchidaceæ. S. Pseudobulbs ovoid, 2½ in. long. L. lanceolate 1 ft. long. Scape pendulous, 6 in. long; fl. numerous, yellow, with a few madder-brown blotches on the lip. South America.

Lueddemannia Lehmanni. (*G. C.* 1880. xiv. 685.) S. epiphyte with long pear-shaped furrowed pseudobulbs and a rich raceme of handsome fl. Sep. salmon-coloured; pet. and lip orange. Colombia.

Luffa Forskalii. (*B. T. O.* 1893. 12. f. 1.) Cucurbitaceæ. S. climber with sulphur-yellow fl., small ovoid ribbed fruits and black seeds. Arabia, &c.

Luisia amesiana. (*G. C.* 1893, xiii. 751: xiv. 218, 32, f. 8.) Orchidaceæ. S. Species with terete l. and clusters of fl. Sep. and pet. ovate, greenish yellow; lip large, lobed, spotted with dull red. First introduced in 1890. Burma.

Luisia Cantharis. (*K. B.* 1895, 193.) S. Allied to *L. volucris*. Stem elongate: l. terete, 6 in. long: raceme very short; fl. 1 in. across, green and purple, the lip resembling a small beetle. Burma.

Luisia volucris. (*G. C.* 1893, xiii, 751; xiv. 32, f. 9.) S. L. terete; fl. solitary in the axils, with linear oblong yellow sep. and pet.; the pet. horn-like: the lip fleshy, brown-purple, pressed close to the stem.

Luma Cheken apiculata. (*Gfl.* t. 890.) Myrtaceæ. G. shrub of neat habit. L. opposite, ½ in. long, shortly stalked, elliptic-ovate, apiculate, of firm texture, dark green above, paler beneath. Fl. axillary, solitary, resembling those of the common myrtle, white. [*Myrtus.*] Chile.

Lunaria biennis variegata. (*Gard.* 1894, 29, f. 9.) Cruciferæ. H. A form with l. broadly margined with yellowish-white.

Lupinus fallax. (*G. C.* 1894, xvi. 434.) Leguminosæ. H. H. bush 3–5 ft. high, with silvery foliage and spikes of violet fl. Mt. Tamalpais, California.

Lupinus Micheneri. (*G. C.* 1894, xvi. 434.) H. Herb. per. of spreading prostrate habit, with dull purplish or brownish green fl. North California.

Luzuriaga radicans. (*B. M.* t. 6465.) Liliaceæ. G. plant with slender angular stems and oblong or elliptic-oblong acute parallel-nerved l. glaucous beneath. Fl. nodding, axillary, 1–3 together, 1½ in. in diam., white. Chile, etc.

Lycaste ayeriana. (*G. C.* 1895, xviii. 49.) Orchidaceæ. G. A species with the habit of *Cattleya citrina* but with angular pseudobulbs, strap-shaped glaucous green l. and drooping green fl. Peru.

Lycaste cinnabarina. (*O. R.* 1893. 303; *L.* ix. t. 394.) G. Allied to *L. mesochlæna*. It has large broad l. and erect single-flowered scapes. Fl. 4 in. across: the sep. and pet. white with a tinge of green and the lips apricot-red. Peru.

Lycaste denningiana. (*G. C.* 1876, vi. 808.) G. Pseudobulbs large, pear-shaped, glaucous. L. petiolate, cuneate-oblong, erect. Peduncle 7 in. long, stout; bract shorter than the stalked ovary. Fl. large; chin short, blunt. Sep. oblong-ligulate, whitish-green. Pet. more cuneate: lip broad, reddish brown, bearing a large rhomboid acute callus on the disk between the side lobes; side lobes entire; front lobe oblong, blunt, serrulate, sides and apex reflexed. South America.

Lycaste Deppei punctatissima. (*G. C.* 1882, xvi. 717; *Fl. and P.* 1882, 122.) G. A distinct var. with whitish green sep. and pet. dotted with purple lip yellow with radiating purple lines on the side lobes and five purple blotches on the middle lobe. Guatemala.

Lycaste Harrisoniæ eburnea. (*W. O. A.* t. 100.) G. var. of *Bifrenaria Harrisoniæ*, with sep. and pet. pure white, and the lip pale yellow with reddish purple forked veins. Brazil.

Lycaste imschootiana. (*G. C.* 1893, xiv. 756, 775, f. 119; *L.* ix. t. 410.) G. A species with the habit of *L. Skinneri*, and with large fl. in which the sep. are pale brown with small purple spots, the pet. and lip yellow with red dots. It has been stated that this is the result of crossing *L. Skinneri* with *Maxillaria nigrescens*.

Lycaste jamesiana. (*Gard.* 1889, xxxv. 502.) G. A var. of *L. Skinneri*. Fl. white, with rich magenta at the base of the pet. and inside the column.

Lycaste Locusta. (*G. C.* 1879, xl. 524.) G. Fl. green excepting the column, which is white. The fl. is short with a blunt chin, a convex disk on the front lobe of lip and two very sharp keels between the side lobes. Peru.

Lycaste Luciani. (*G. C.* 1893, xiv. 756; *L.* ix. t. 412.) G. Allied to *L. lasioglossa*: the sep. pale brown with pink spots; the pet. white with rosy dots; the lip pink and white.

Lycaste macrobulbon Youngii. (*L.* viii. t. 368.) G. This plant has been in cultivation for some years under the name of *L. Youngii*. [Probably *L. macrobulbon*, Lindl., of which a figure was published in *B. M.* t. 4228, as *Maxillaria macrobulbon*, Hook.]

Lycaste macropogon. (*G. C.* 1888, iii. 200; *H. G.* 1878, 179; *O.* 1888, 357.) G. Allied to *L. macrobulbon*, but with larger orange-coloured fl. Sep. oblong, acute, hairy at the base: pet. smaller; lip three-lobed: front lobe cuneate-oblong, acute, hairy, with a broad rhomboid tubercle at its base. Costa Rica.

Lycaste plana measuresiana. (*W. O. A.* t. 306; *G. C.* 1887, ii. 788.) G. Free-flowering var. with reddish brown sep. tipped with green and green outside. Pet. and lip white, densely spotted with rose-purple except the margins of the pet. Bolivia.

Lycaste rossiana. (*O. R.* 1893, 239.) G. Allied to *L. cruenta*, but with smaller fl. and a differently formed lip. The sep. are oblong, acute, greenish yellow: the pet. are broader, deep orange yellow with a few brown spots near the base and the lip is three-lobed, yellow, faintly barred with brown.

Lycaste schilleriana Lehmanni. (*Gfl.* t. 1321.) G. A var. having the lip marked with rosy carmine, and the pet. dotted with red on the outside. Colombia.

Lycaste schœnbrunnensis. (*O. R.* 1893, 51; *W. G.* 1893, 287, t.; *G. C.* 1894, xvi. 118, f. 18.) G. A garden hybrid between *L. Skinneri* and probably *L. schilleriana*.

Lycaste Skinneri alba. (*Ill. H.* 1880, t. 405.) G. A distinct var. with pure white fl. Mexico.

—— Var. **armeniaca.** (*R.* ser. 2, t. 18.) G. A beautiful var. with an apricot-yellow lip.

—— Var. **purpurea.** (*L.* viii. t. 379.) G. A var. with pale rose sep., rose-purple pet. and a white lip slightly tinged with yellow.

—— Var. **Reginæ.** (*W. O. A.* t. 283.) G. A var. with light rosy purple sep. and dark magenta-purple pet. and lip. Guatemala.

Lycaste smeeana. (*G. C.* 1883, xx. 198.) G. Much like *L. Deppei*, but with white fl. having a light purple border to the triangular acute undulate front lobe of the lip and rows of small purple stripes and spots over the whole surface.

Lycaste sulphurea. (*G. C.* 1882, xvii. 218.) G. A pretty species with light sulphur-coloured fl. spotted with red and purple-brown.

Lycaste Wittigi. (*G. C.* 1878, x. 654.) G. Much like *L. tetragona* but with a different lip. Lip convex with a blunt emarginate middle lobe covered with hairs; outside white, with small purplish dots on the middle lobe; side lobes acute, rather large, striped with dark purple; disk dark violet-purple. At the base of the front lobe is a brown emarginate depressed lamella. Rio de Janeiro.

Lychnis Viscaria, flore pleno. (*B. H.* 1876, t. 7.) Caryophyllaceæ. H. A var. with double pink fl.

Lycium pallidum. (*G. and F.* 1888, 340, f. 54.) Solanaceæ. H. shr. something in the way of *L. vulgare*. Branches somewhat drooping with a few long slender spines. L. oblanceolate, 1–2 in. long, very pale. Fl. solitary or in pairs, axillary, pedicellate; corolla ¾ in. long, tubular-funnel-shaped, with broad rounded spreading lobes, green or tinged with purple. Berries bright red, nearly ½ in. long. New Mexico; Arizona.

Lycopodium mooreanum. (*G. C.* 1892, xii. 582.) Lycopodiaceæ. S. Allied to *L. reflexum* with stems 1 ft. long, erect, forked; l. crowded, short, pale green. Brazil.

Lycopodium squarrosum. (*Ill. H.* 1881, t. 428.) S. per. with long drooping stems densely covered with spreading lanceolate-subulate bright green l. Tropical Asia.

Lycopodium ulicifolium. (*Williams' Cat.* 1880, 16.) S. or G. A pendulous species with dichotomous stems 2 ft. long and about ½ in. thick, densely clothed with bright green linear-lanceolate very sharply pointed l. Himalaya.

Lycoris sanguinea. (*B. T. C.* 1888, 328.) Amaryllidaceæ. H. bulb, with 3–7 linear obtuse l. ⅙ in. broad and a slender scape 1-1½ ft. long, bearing an umbel of 4-6 erect carmine fl. 1½–3 in. long with erect segments which are not crisped or undulate. Japan.

Lycoris Sewerzowi. (*Gfl.* t. 911.) G. Bulb long, narrow, ovoid, bearing several linear l. and a scape 12-14 in. long, terminating in a 2-spathed umbel of 5–10 pedunculate fl.: corolla 1½ in. long, ¾ in. in diam., funnel-shaped. [*Ungernia trisphæra*, Bunge.] North India.

Lycoris squamigera. (*B. T. C.* 1888, 327; *G. and F.* 1890, 177, f. 32; *B. M.* t. 7547.) H. bulb with 5–6 l. 1 ft. or more long and ¾–1 in. broad. Scape stout, 2–3 ft. long, with an umbel of 4–7 rose-coloured fl. about 3 in. long with shorter stamens than in *L. aurea*. Japan.

Lycoris Terracianii. (*Damm. Cat.* 1889, 4.) H. bulb stated to be a var. of *L. radiata* with very large crimson

fl., which are edged with white when fading. [*L. radiata*, Herb. var. *variegata*, Baker.]

Lygodictyon Forsteri. (*G. C.* 1882. xvii. 331. f. 47.) Filices. S. A handsome climbing fern with bright green pinnate fronds: pinnæ shortly stalked. lanceolate: base truncate; margin wavy and finely toothed. Fertile segments broader and shorter: the sporangia in clusters on the margin like blunt teeth. [*Lygodium reticulatum*. Schk.] Polynesia.

Lysimachia brachystachys. (*B. M.* 1881, 90, t.) Primulaceæ. H. per., 1–2 ft. high. L. tomentose, alternate, narrowly lanceolate. acute. Fl. white, disposed in dense terminal spikes. Japan. [*L. barystachys*, Bunge.]

Lysimachia paridiformis. (*G. C.* 1891, x. 190; *Gfl.* 1891, 495: *B. M.* t. 7226.) H. A remarkable species resembling *Paris quadrifolia*; l. oval, tapering to both ends: fl. axillary bright yellow. Central China.

Lysionotus serrata. (*B. M.* t. 6538.) Gesneraceæ. S. herb. per. Rootstock fleshy. Stems 1-2 ft. high. stout, terete, fleshy. green dotted with purple. L. opposite or whorled, 4–10 in. long. elliptic or oblong-lanceolate, acuminate, acute at the base, serrate, dark green with paler veins above, reddish beneath. Fl. in stalked axillary cymes. Corolla $1\frac{1}{2}$ in. long. funnel-shaped; mouth oblique, 5-lobed. pale lilac with darker mauve-coloured veins and two parallel raised ridges in the throat. Sub-tropical Himalaya.

Lysionotus ternifolia. (*Fl. des S.* t. 2458–9.) S. A handsome free-flowering per. glabrous herb. L. lanceolate, acute, serrate, usually three in a whorl. Fl. in axillary long-stalked 4–8-flowered cymes; corolla $1\frac{1}{2}$ in. long, obliquely sub-bilabiate, with a funnel-shaped tube, pale blue, with two yellow stripes on the lower side of the tube. Himalaya

Macaranga porteana. (*R. H.* 1888, 176. f. 36: *G. and F.* 1888, 168: *B. M.* t. 7407.) Euphorbiaceæ. S. tree. L. peltate. $1\frac{1}{2}$ ft. long and nearly as broad. roundish-ovate. acute; margin ciliate-toothed. wavy, upper surface with a sparse cobwebby pubescence. under side black-dotted, veins very prominent, pubescent or setulose beneath. Petioles 20–24 in. long with large ovate-lanceolate acuminate stipules. Philippines.

Maclura aurantiaca inermis. (*R. H.* 1896, 33, f. 10.) Urticaceæ. H. A form with larger l. than the type, and with quite spineless branches.

Macradenia Brassavolæ. (*G. C.* 1880, xiii. 101.) Orchidaceæ. S. L. one or two, oblong, acute, 5 in. long, $\frac{1}{2}$ in. broad. Peduncle densely-flowered. Sep. and pet. cinnamon; margins ochre-coloured. The lip trifid: side lobes rhomboid; middle very large, cuspidate. white with purple streaks. with yellow borders to the side lobes. Guatemala.

Macrochordium macranthum. (*Gfl.* 1886, 297, f. 34.) Bromeliaceæ. S. L. long. recurved. spinous-toothed, of a dark shining green above, densely white, punctate-striate beneath. Peduncle shorter than the l., white-woolly, with long narrow bracts, and a small globose head of small yellowish fl., which fade to black. [*Echmea conspicui-armata*, Baker.] Brazil.

Macropiper excelsum aureo-pictum. (*Bull Cat.* 1876, 10.) Piperaceæ. G. evergreen shr., densely branched. L. broadly cordate, very shortly acuminate, 5–7-nerved, green. marked with an irregular creamy blotch extending more or less from the base upwards. [*Piper excelsum*, Forst.] New Zealand.

Macroscepis obovata. (*B. M.* t. 6815.) Asclepiadaceæ. S. climber with long slender stems, covered with brown hairs, elliptic shortly acuminate l. slightly cordate at the base, similarly clothed with brown hairs. Fl. brownish, about 1 in. in diam. in shortly peduncled dense axillary cymes. Tropical America.

Macrotomia Benthami. (*B. M.* t. 7003; *G. C.* 1888, iv. 15; *G. and F.* 1883, 299.) Boraginaceæ. H. herbaceous per. 1–3 ft. high, roughly hairy. Radical l. 6–15 in. long, narrowly lanceolate. 5–7-ribbed. Stem l. smaller. Fl. in a dense leafy spike 6–12 in. long. by 2–$2\frac{1}{2}$ in. thick. Calyx-lobes about 1 in. long, linear. Corolla shorter than the calyx-lobes. funnel-shaped with short spreading lobes, dark brownish purple. North-west Himalaya.

Macrotomia Cephalotes. (*Gfl.* 1896, 173.) H. per. with silvery l. and large golden yellow fl. Asia Minor.

Macrozamia Mackenzii. (*Bull Cat.* 1877, 7, f. 2.) Cycadaceæ. G. Cycad with thick trunk and lanceolate pinnate l.; pinnæ narrow. Australia.

Magnolia biflora. (*R. H.* 1885. 521.) Magnoliaceæ. H. or H. H. Fl. usually in pairs, which open in succession. [*M. grandiflora*, Linn. var.]

Magnolia Campbellii. (*B. M.* t. 6793.) G. tree with large deciduous elliptic-oblong acute l. hairy beneath; fl. fine, showy. 6–10 in. in diam., deep rose-pink outside, white within, with a pale pink edge. East Himalaya.

Magnolia halliana. (*G. C.* 1878. ix. 378.) H. [*M. stellata*, Maxim.]

Magnolia parviflora, and var. **minor.** (*F. G.* 1888, 288.) H. Fl. similar to those of *M. glauca* but white, marked with crimson. The var. is smaller in all its parts. Japan.

Magnolia stellata. (*B. M.* t. 6370: *R. H.* 1878, 270: *F. M.* t. 309.) H. small tree flowering before the l. fully develop. L. deciduous, varying from obovate and obtuse to elliptic and shortly acuminate, membranous, 2–5 in. long. Fl. 3 in. in diam., white, sweet-scented; sep. shorter than pet., oblong, hairy outside; pet. reflexed, narrow, linear-oblong, obtuse; anthers yellow, shorter than the green pistil. Japan.

Magnolia stricta. (*Gard.* 1893, xliv. 391.) H. Hybrid between *M. soulangeana* and *M. obovata*.

Magnolia Watsoni. (*B. M.* t. 7157; *G. C.* 1891, x. 34: *G. and F.* 1891, 112.) H. A deciduous species with large creamy white fl. with blood-red filaments. This plant is grown in some gardens under the name of *M. parviflora*. Japan.

Magnolia Wiesneri. (*R. H.* 1890, 406: *F. G.* 1890, 457.) H.? A dwarf bushy tree glabrous in all parts, with ovate-oblong thick deciduous l., 6–8 in. long by 3–4 in. broad, glaucous green. Fl. pure white, fragrant. Japan.

Mahonia moseriana. (*Jard.* 1895, 128.) Berberidaceæ. H. A var. of *Berberis Aquifolium* with light green l. tinged with coppery red.

Mahonia rotundifolia. (*R. H.* 1881. 250.) H. A spineless var. of *Berberis Aquifolium*, with roundish leaflets, almost unarmed on the margins. [*Berberis Aquifolium*, Pursh. var. *rotundifolia*, Hort.]

Mallotus japonicus. (*R. H.* 1894. 103, f. 32.) Euphorbiaceæ. G. A bush or small tree with alternate cordate-acuminate l. and inconspicuous paniculate fl.

Malus dasyphylla armeniæfolia. (*G. C.* 1891, ix. 461; *Nat. Arb. Zösch.* 1891, 16.) Rosaceæ. H. tree. A form of the wild apple with tomentose l., which are much more like those of a plum than those of an apricot, though the name points to the latter. [*Pyrus.*] Levant.

Malus medwietzkyana. (*G. C.* 1891, ix. 461: *Nat. Arb. Zösch.* 1891, 16: *F. G.* 1891, 164.) H. tree. Except the old l., all parts of the tree are red, bark and wood, as well as flowers and fruits, which resemble small Sina-apples: even the pulp, which has a fine flavour, is of a dark rosy colour. Siberia, &c.

Malus microcarpa Bertini. (*R. H.* 1882, 393, f. 88.) H. This is a form of *Pyrus floribunda* with much larger fr. than usual.

Malus microcarpa fastigiata. (*R. H.* 1879, 215.) H. var. with erect fastigiate branches, large white fl. and edible fruit of a shining yellow, washed and striped with red.

Malus Parkmanni, flore pleno. (*G. C.* 1891, ix. 461.) H. This beautiful tree or large shrub was obtained under this name from America. It distinctly suggests *M. spectabilis*, but is to be regarded rather as a form with double flowers of *Pyrus floribunda*, Nichols.

Malva hastata. (*B. T. G.* 1893, 108, f. 15.) Malvaceæ. H. A branched annual with large long-stalked rose-violet fl. Mexico.

Malvastrum Gilliesii. (*G. C.* 1885, xxiv. 166.) Malvaceæ. H. Known in gardens as *Malva geranioides*. Parana.

Mammillaria barbata. (*Gn.* t. 1208, f. a–e; t. 1400.) Cactaceæ. G. succulent with short cylindric stems densely crowded with cylindric mammillæ; outer spines radiate, consisting of fine setæ and stouter spines mixed; central spines longer than the others, hooked at the apex. Fl. about 1 in. in diam.; pet. pale red with violet mid-stripes. Texas.

Mammillaria chlorantha. (*Gfl.* 1883, 87.) G. A species with a cylindric stem covered with long densely interwoven spines and having greenish fl. Texas.

Mammillaria cornimamma. (*G. C.* 1887, ii. 186.) G. succulent with globose stem, white woolly in the axils of the younger tubercles and spine tufts. Tubercles large with 10–13 rather stout radiating spines and 1–3 stouter and longer inner spines. Fl. 3 in. in diam., light yellow, with a purplish stripe down the back of all but the innermost segments, which are all linear-lanceolate, acute. Stamens and stigmas yellow; the filaments tinted with orange-red.

Mammillaria echinata. (*Gfl.* t. 1208, f. d–e.) G. succulent. A dwarf tufted plant, very ornamental when in fruit. The stems are globose, about 1½ in. in diam., with crowded cylindric mammillæ crowned with short radiating spines. Fl. reddish outside, white within. Fruit pear-shaped, bright red. Mexico.

Mammillaria Grusoni. (*Gfl.* 1889, 105, f. 20.) G. succulent with globose stem; the tubercles four-sided and naked in their axils, bearing 14 radiate spines and two central spines, reddish when young, becoming white with age: fl. yellow. Mexico.

Mammillaria heeseana. (*M. K.* 1896, 125.) G. This has remarkably long spines. Plant depressed globose, when young clothed with soft white wool intermixed with weak bristles, naked when old. Fl. carmine-red. Mexico.

Mammillaria Purpusi. (*Späth Cat.* 1894–5.) H. Thickly beset with spines and rose-red fl. Mountains of Colorado.

Mammillaria sanguinea. (*Gfl.* t. 1111; *Fl. and P.* 1883, 75.) G. Stem short, columnar: mammillæ glaucous green, woolly in the axils, with 24–26 radiating spines and 7–9 stronger central ones about twice as long as the outer spines. Fl. dark red. Mexico.

Mammillaria spæthiana. (*Späth Cat.* 1894–5.) H. Similar in armature and fl. to *M. Purpusi* but depressed globose in form. Mountains of Colorado.

Manettia micans. (*Fl. and P.* 1880, 144.) Rubiaceæ. S. per. A handsome climber, with neat light green foliage and leafy panicles of long-stalked tubular fl. Brazil.

Manihot carthaginensis. (*B. G.* 1889, 454.) Euphorbiaceæ. S. tree of slender habit, with large palmate l. of a fresh green colour.

Mapania lucida. (*Ill. H.* 1885, t. 557.) Cyperaceæ. S. per. foliage plant with long-stalked l. having an oblong abruptly acuminate three-nerved blade dark green above, tinged with purple beneath. [*M. humilis*, F. Villar.] Borneo.

Mappa porteana. (*R. H.* 1888, 176.) [*Macaranga porteana*, André.]

Maranta argentea. (*Bull Cat.* 1884, 13.) Scitamineæ. S. foliage plant with pairs of large oblong acute silvery-grey l. marked with narrow curving lines of deep green. Brazil.

Maranta arundinacea variegata. (*G. C.* 1891, ix. 73.) S. This is the correct name of the plant cultivated in gardens under the name *Phrynium variegatum*.

Maranta asymmetrica. (*Bull Cat.* 1882, 16.) S. foliage plant with oblique ovate l. of a dark green, marked with oblique silvery grey bands.

Maranta conspicua. (*Bull Cat.* 1885, 14.) S. A small species with oblong-ovate l. dark green above, pinnately marked with broken distant bands of pale yellowish green; purplish beneath. Brazil.

Maranta depressa. (*B. H.* 1880, 97, t. 6.) S. per. herb with long straggling procumbent stems. L. elliptic-oblong, obtuse, dark green, with the course of the mid-rib and veins pale green, and marked between the veins with large chocolate-brown blotches. Fl. white in a slender lax spike. Brazil.

Maranta Fascinator. (*Ill. H.* 1894, t. 7.) S. A dwarf species with distichous l. truncate at the base and slightly acuminate at the tip, purple beneath; ground colour of upper surface dark green, silvery towards the centre, pale green towards the edges: nerves a fine red. Brazil.

Maranta gratiosa. (*Bull Cat.* 1884, 13.) S. Foliage plant with broadly oblong sub-cordate l. of a silvery grey, with the midrib and 5 or 6 tapering curved bands on each side of it bright green. Brazil.

Maranta Helena. (*R. H.* 1879, 20.) S. Garden hybrid between *M. eximia* and *M. Van-Den-Heckei*.

Maranta iconifera. (*Bull Cat.* 1887, 11.) S. foliage plant.

Maranta kerchoviana. (*B. H.* 1879. 77. t. 5.) S. per. dwarf. Petioles 1½–2 in. long, erect. Blade spreading, 2–5 in. long, 1½–3 in. broad, broadly elliptic, obtuse, shortly and abruptly cuspidate, clear satiny green, with a series of 4–5 large oblong dark brown blotches on each side of midrib, which at length change to dark green. Brazil.

Maranta Leonæ. (*G. C.* 1893, xiii. 751.) S. A low-growing plant with ovate l., the blade 6 in. long and the petiole about the same length, both covered with soft silky hair, and coloured green with grey variegation.

Maranta major. (*G. C.* 1896, xix. 529.) S. Plant about 3 ft. high with erect long petioles and ovate green l.-blades. Fl. not known.

Maranta massangeana, var. **albo-lineata, metallica, smaragdina, atrata, florentina, fulgida.** (*G. C.* 1894, xv. 663.) S. Plants which appear to be varieties of this sub-species have been named as above. [*M. massangeana*, E. Morr. is a sub-species of *M. bicolor*, Ker-Gawl.]

Maranta musaica. (*Bull Cat.* 1884, 13.) S. form with obliquely cordate ovate l. 7 in. long by 3½ in. wide, of a bright glossy green, marked with numerous close-set transverse veins. Brazil.

Maranta nitens. (*Bull Cat.* 1880, 6, t. 12.) S. With pale green glossy l. barred with dark green lines. Brazil.

Maranta nitida. (*Bull Cat.* 1884, 13.) S. A dwarf species with oblong acute l. 6 in. long by 3 in. broad, of a pale bright shining green, with 4–5 oblong green patches on each side of the midrib. Brazil.

Maranta polita. (*Bull Cat.* 1884. 14.) S. A dwarf species with l. 4–5 in. long, 2 in. broad, of a glossy green, elegantly marked with stipitate oblong dark green blotches, somewhat as in *M. makoyana*. Brazil.

Maranta sanderiana. (*G. C.* 1892, xi. 731.) S. foliage plant in the way of *M. roseo-lineata*, but with much larger l.

Maranta speciosa. (*Bull Cat.* 1884, 14, f. 6.) S. A pretty foliage plant with obliquely elliptic-oblong acute l. of a bright green, pinnately banded with greenish white. Brazil.

Marcgravia indica. (*Bull Cat.* 1884. 14.) Ternstroemiaceæ. S. climber with flattened jointed stem and distichous oblong-ovate deep green l.

Marica brachypus. (*B. M.* t. 6380.) Iridaceæ. [Syn. *Cypella brachypus*, Hort., which see.]

Marica northiana splendens. (*Ill. H.* 1895, t. 40.) G. A var. with fl. more brightly coloured than the type. Brazil.

Marica occidentalis. (*G. C.* 1892, xii. 150.) G. Resembling *M. northiana*, but the fl. is not so large and the l. are shorter. Peru.

Mariscus umbilensis. (*G. C.* 1891, x. 190.) Cyperaceæ. S. The correct name of the plant cultivated in England as *Cyperus natalensis*.

Martinezia caryotæfolia. (*B. M.* t. 6854.) Palmæ. S. Palm with a ringed and spiny stem a little swollen at the base. L. 4–5 ft. long, pinnate, with a spiny rhachis; leaflets 9–12 in. long, 3–4 in. broad, cuneate, denticulate, truncately 3-lobed at the apex, with smaller lobules. Spadix loosely branched; fl. scattered, small, greenish. Colombia.

Mascarenhasia curnowiana. (*B. M.* t. 6612: *Fl. and P.* 1882, 37.) Apocynaceæ. S. evergreen shr. with opposite oblong-lanceolate acuminate deep green l. and terminal umbels of bright carmine fl. Corolla with a narrow tube and spreading 5-lobed limb, about 2 in. in diam. Madagascar.

Masdevallia abbreviata. (*G. C.* 1878, x. 106.) Orchidaceæ. S. Intermediate between *M. polysticta* and *M. melanopus*, but most like *M. polysticta*, with shorter fl., more gibbous underneath at the base, of the same colours, but with fewer dots.

Masdevallia acrochordonia. (*G. C.* 1885, xxiii. 174.) G. Allied to *M. Ephippium* but with narrower l. and acuminate pet. Peduncle many-flowered; inner surface of the sep. warted. Lip with a wavy median keel. Ecuador.

Masdevallia anchorifera. (*G. C.* 1884, xxi. 577.) G. Allied to *M. ochthodes*, but with a smooth peduncle and distichous raceme of purple fl., the borders of the side sep. being ochre with purple spots, and the tails of the sep. recurved. [*Scaphosepalum anchoriferum*, Rolfe.] Costa Rica.

Masdevallia Arminii. (*G. C.* 1882, xviii. 102.) G. Fl. expanded, rose-coloured, tinged with purple.

Masdevallia astuta. (*G. C.* 1886, xxvi. 558.) G. Allied to *M. gaskelliana*, with oblong acute l. 6–8 in. long. Peduncle about as long as the l.: sep. triangular, outside brown with the centre and apex yellow, inside hispid, ochreous, spotted with brown, tails brown. Lip saccate with 3 keels, pale yellow. [*M. erythrochaete*, Reichb. f.] Costa Rica.

Masdevallia backhousiana. (*G. C.* 1879, xi. 716.) G. A species of the *Chimaera* group, somewhat like *M. Wallisii* (the usual *M. Chimaera* of gardens), but fl. much larger, colours similar but brighter. Lip long, narrow, with strong teeth on both sides and an acute sinus at the top. [*M. Chimaera*, Reichb. f. var. *backhousiana*.] Colombia.

Masdevallia bartæana. (*G. C.* 1876, v. 170.) G. Allied to *M. amabilis*, but with scarlet fl. and having the lateral sep. connate in a straight line, without an included sinus between them. Peru.

Masdevallia bella. (*G. C.* 1878, ix. 725; *B. M.* 1884, t. 3.) G. Habit of *M. Chimaera* and *M. Wallisii*. Fl. large, purplish brown and shining outside, yellow inside; tails purplish brown; pet. not papillose, marked with two sigmoid keels. Colombia.

Masdevallia biflora. (*Icon. Hort. Petrop.* 1890, xi. 306; *Gfl.* t. 1341–2.) G. A small-flowered species with oblanceolate-oblong l. and filiform peduncles rather shorter than the l., bearing two white fl. marked with a blackish-purple spot on the inside at the base of the lateral sep. and a purple mid-line on the upper sep. [*M. pachyura*, Reichb. f.]

Masdevallia brevis. (*G. C.* 1883, xx. 588.) G. Near *M. ochthodes*, but smaller and more slender. Upper sep. yellow with 3 rows of purple spots and a dark purple tail. Lateral sep. having the upper front area orange and purple, the rest brown. Pet. yellowish and brown, rhomboid with an inflexed point. Lip long, narrow, stalked, with a pandurate fimbriate blade. [*Scaphosepalum breve*, Rolfe.] British Guiana.

Masdevallia burbidgeana. (*O. B.* 1893, 265.) G. Section *Saccolabiata*. L. 5 in. long, tufted; fl.-tube less than ½ in. across: sep. 1 in. long, lateral united half way, greenish yellow with brown spots and yellow hairs; lip yellowish. Colombia.

Masdevallia calura. (*G. C.* 1883, xx. 230.) G. In the way of *M. marginella*, with bluish purple fl., the inner surface covered with obtuse warts.

Masdevallia campyloglossa. (*G. C.* 1878, x. 588.) G. In the way of *M. coriacea*, with smaller greenish white fl., with nine purplish black dots over the nerves: tails narrower and the perigone divided nearly to half its length: lip very long, narrow, acute, with a small angle on each side near the apex, whitish with three violet stripes. Colombia.

Masdevallia Carderi. (*G. C.* 1883, xix. 784; xx. 181, f. 30; *B. M.* t. 7125.) G. A pretty species with a cup-shaped perianth and spreading tails: outside whitish, ochre-orange at the base, with some dark purple spots around the middle and on the yellow tails: inside covered with rusty hairs. Colombia.

Masdevallia caudata Estradæ. (*G. C.* 1889, v. 714: *Veitch Man. Masder.* 74.) G. Raised from the two species indicated by the name.

Masdevallia Chelsoni. (*G. C.* 1880, xiii. 554.) G. Garden hybrid raised from *M. amabilis* and *M. reitchiana*, the latter being the pollen parent.

—— Var. **splendens.** (*Veitch Man. Masder.* 74; *G. C.* 1889, v. 619.) G. A result of the same cross as the type, but with *M. amabilis* as the pollen parent.

Masdevallia Chestertoni. (*G. C.* 1883. xix. 532; *B. M.* t. 6977.) G. In the way of *M. nycterina* with greenish sulphur-coloured fl. spotted with black and with black tails to the ovate sep.; pet. orange with two black spots and a tumour. Colombia.

Masdevallia Chimæra. (*G. C.* 1881. xv. 463: xvi. 113, f. 26; *W. O. A.* t. 203.) G. The plant usually cultivated under this name and figured at *B. M.* t. 6152 is its var. *Wallisii*; the type *M. Chimæra* is distinguished from this by its very long acuminate tapering triangular sep. 10–12 in. long, blackish, dotted and hairy, and by the lip having no angle at its base. Colombia.

—— Var. **Gorgona.** (*Veitch Man. Masder.* 31.) G. A var. with the ground colour of the fl. canary-yellow densely spotted with red-purple and the lip tinged with pale orange-red. [Syn. *M. Gorgona*, Hort.]

—— Var. **vanneriana.** (*O. R.* 1893. 206.) G. The result of crossing *M. Chimæra Wallisii* with *M. Chimæra Roezlii*.

Masdevallia coccinea. (*Fl.* t. 870.) G. L. coriaceous, spathulate-oblong, obtuse. Peduncles slender, 1 ft. long, 1-flowered. Fl. 1½ in. in diam., deep scarlet with a violet gloss: lower lip deeply parted, its lobes oblong, suddenly contracted to a short point; upper lip arching forward, linear-subulate from a dilated base. Colombia.

—— Var. **conchiflora.** (*Veitch Man. Masder.* 34.) G. A form with larger fl., having the lateral sep. broader, rounder, and concave. [Syn. *M. harryana*, Reichb. f. var. *conchiflora*, Hort.]

Masdevallia corniculata. (*G. C.* 1878. ix. 72.) G. Fl. as large as *M. coriacea*, of a dark cinnamon-brown colour; pet. terminating in an ascending warty columnar body. Colombia.

Masdevallia costaricensis. (*G. C.* 1890. viii 183; *Fl.* 1890, 647.) G. A small densely tufted plant with spathulate l. and three-flowered scapes: the fl. white, with yellow tails. Costa Rica.

Masdevallia courtauldiana. (*G. C.* 1889. v. 200; *Veitch Man. Masder.* 74.) G. A garden hybrid raised from *M. rosea* and *M. candata*.

Masdevallia cucullata. (*G. C.* 1883, xix. 592.) G. A fine species with glossy blackish-purple fl., whitish inside at base and with the tips of the tails yellow. Colombia.

Masdevallia Culex. (*G. C.* 1888, iii. 361. 404. 488.) G. [*Pleurothallis macroblepharis*, Reichb. f.]

Masdevallia cupularis. (*G. C.* 1888. iii. 233: *H. G.* 1888, 180: *O.* 1888, 162.) G. L. small, oblong, obtuse, shining. Fl. about 2 in. long; the cup-shaped part light brown densely spotted with darker brown, glossy, very dark brown inside; pet. and lip ochreous, the lip with 3 brown lines on the front lobe and numerous spots on the side lobes. Costa Rica.

Masdevallia Curlei. (*G. C.* 1896, xix. 40.) G. A garden hybrid between *M. macrura* and *M. tovarensis*.

Masdevallia dayana. (*G. C.* 1880. xiv. 295.) G. L. flat, dark green above, purple beneath, 4½ in. by 3 in. The upper sep. yellowish white, with seven membranous keels spotted with purple. The inferior connate seps. orange, with some purple-brown spots and borders towards the apex. [*Cryptophoranthus dayanus*, Rolfe.] Colombia.

Masdevallia demissa. (*G. C.* 1887, ii. 9.) G. L. cuneate-spathulate, very thick. Peduncle much shorter than the l., 1-flowered. Fl. with the upper sep. yellow, with 3 brownish purple lines, and the side sep. brownish purple: tails yellow, the lower ones descending, the upper one incumbent: sep. triangular, the lateral ones connate and much longer than the dorsal one. Costa Rica.

Masdevallia eclyptrata. (*G. C.* 1895. xviii. 577.) G. Somewhat resembling *M. cucullata*, with rich orange-yellow fl.

Masdevallia Eduardi. (*G. C.* 1880. xiv. 778.) G. Rhizome creeping, producing l. at intervals of about 1 in. The blades of the l. scarcely more than ½ in. long and ¾ in. wide: the peduncles are nearly a span high and bear two or three fl., which are apparently red. Colombia.

Masdevallia ellisiana (*G. C.* 1889. vi. 154; *Veitch Man. Masder.* 75.) G. A hybrid raised from *M. harryana* and *M. ignea*.

Masdevallia erinacea. (*G. C.* 1881, xv. 104.) G. A small species with linear-spathulate obscurely 3-toothed l. 2 in. long. Fl. small, light ochre, with a dark purple ring over the rough ovary and a few scattered spots; the tails and disks of the lateral sep. orange. Colombia.

Masdevallia erythrochæte. (*G. C.* 1882, xviii. 392.) G. Near *M. houtteana* but larger. L. 1 ft. long, ¾ in. broad. Peduncles 4 in. long. Fl. white and light yellow, with reddish-purple tails. Sep. inside covered with styliform processes. Colombia.

Masdevallia Estradæ delicata. (*G. C.* 1882, xvii. 525.) G. A trifling var. with more yellow and purple than in the type.

Masdevallia falcata. (*G. C.* 1891, ix. 552.) S. A hybrid between *M. Lindeni* and *M. Veitchii*.

Masdevallia fasciata. (*G. C.* 1881, xv. 202.) G. Lip seated on a long production of the foot of the column. The odd sep. is oblong, hooded, with a filiform tail: the other sep. are narrower: lip pandurate. Doubtful if yet introduced. Colombia.

Masdevallia flaveola. (*G. C.* 1884, xxi. 638.) G. A small species resembling *M. attenuata*, with cuneate spathulate l. and slender 2–3-flowered peduncles: fl. light yellow. Costa Rica.

Masdevallia forgetiana. (*G. C.* 1895, xviii. 184.) G. A species with comparatively narrow bright green l. and small fl. Northern Brazil.

Masdevallia fragrans. (*G. C.* 1893, xiv. 160.) G. species with l. like *M. elephanticeps* and cupped yellowish fl. with short fleshy tails, much like those of *M. pachyantha* in shape. Colombia.

Masdevallia Fraseri. (*G. C.* 1882, xvii. 143.) G. A garden hybrid between *M. ignea* and *M. coccinea*.

Masdevallia fulvescens. (*G. C.* 1890, viii. 325, f. 65; *O.* 1890, 257: *H. G.* 1890, 504.) G. Allied to *M. infracta* but with more brightly coloured fl.: sep. with tails 2 in long, light buff and brown, the upper sep. orange yellow; pet. and lip very small, white. Colombia.

Masdevallia gairiana. (*G. C.* 1884, xxii. 38.) G. A garden hybrid between *M. veitchiana* and *M. Davisii*.

Masdevallia galeniana. (*G. C.* 1887, ii. 586.) G. Garden hybrid.

Masdevallia Gargantua. (*G. C.* 1876, vi. 516.) G. Fl. somewhat like *M. elephanticeps* but only ⅔ the size, leather-yellow; lower part of tube light velvety sordid purple, with three pale whitish stripes on each side: lip rough, blackish purple: pet. and column white, with some light lake-coloured stripes. Colombia.

Masdevallia gaskelliana. (*G. C.* 1883, xx. 294.) G. In the way of *M. radiosa*. L. narrow, lanceolate, acute, 4 in. long. Peduncles 1-flowered, outside of fl. purple-mauve, with two yellow areas at the base and apex of the lateral sep.: tails longer, mauve-purple; the inside of the fl. is light yellow spotted with mauve. [*M. erythrochæte*, Reichb. f.]

Masdevallia gemmata. (*G. C.* 1883, xx. 294.) G. Dwarf species, with cuneate-linear l., 2 in. long, obscurely 3-toothed at the apex. Peduncles 1-flowered: dorsal sep. triangular, ochreous, with an orange tail of equal length, lateral sep. larger, oblique, ochreous at base, with orange nerves; the front part purple; tails orange, nearly as long as the rest of the sep.; lip cordate purple.

Masdevallia gibberosa. (*G. C.* 1876, v. 8.) G. L. cuneate-ligulate, acute, very narrow above the articulation. Peduncle laxly racemose, covered with numerous warts of two kinds; pedicels jointed to the ovaries. Fl. dark red: the tails of the lateral sep. green; the sep. connate for ¾ at base, ascending, curved and bent in the free part. [*Scaphosepalum gibberosum*, Rolfe, *B. M.* t. 6990.] Colombia.

Masdevallia glaphyrantha. (*G. C.* 1886, xxvi. 648; *Gfl.* 1887, 340.) G. Garden hybrid.

Masdevallia guttulata. (*G. C.* 1890, viii. 267; *H. G.* 1890, 503.) G. Allied to *M. torarensis*, but the fl. only half as large and coloured yellowish white with spots of purple. Ecuador?

—— Var. **acanthifolia.** (*Bull Cat.* 1883, 14.) Fl. rich violet rose.

Masdevallia guttulata armeniaca. (*W. O. A.* t. 224.) A handsome var. with rich deep apricot-coloured fl., veined with flame-red and having a yellow mouth to the tube. Colombia.

—— Var. **atrosanguinea.** (*W. O. A.* t. 105.) Fl. rich glowing crimson, flushed with magenta. Colombia.

—— Var. **carnea.** (*L.* viii. t. 382.) Fl. pink with rose-coloured veins. [*M. coccinea*, Linden, var.]

—— Var. **conchiflora.** (*Bull Cat.* 1883, 14.) Fl. rich rosy lake.

—— Var. **decora.** (*W. O. A.* t. 344.) A var. with light rosy purple fl., faintly nerved with darker purple, and with crimson tips. Colombia.

—— Var. **Gravesiæ.** (*G. C.* 1892, xii. 122, f. 21.) G. A var. with pure white fl.

—— Var. **illustris.** (*L.* viii. t. 382.) Fl. blood-red with a bluish tinge at the centre. [*M. coccinea*, Linden, var.]

—— Var. **imperialis.** (*Fl. and P.* 1882, 90.) A fine form with large crimson-magenta fl. Colombia.

—— Var. **kegeljani.** (*L.* viii. t. 382.) Fl. blood-red with a lilac band down the centre of the sepals. [*M. coccinea*, Linden, var.]

—— Var. **lilacina.** (*L.* viii. t. 382.) Fl. pale purple with darker veins and edges. [*M. coccinea*, Linden, var.]

—— Var. **miniata.** (*W. O. A.* t. 105.) Fl. bright vermilion, flushed with scarlet. Colombia.

—— Var. **regalis.** (*Bull Cat.* 1883, 14.) Fl. dark glowing crimson.

—— Var. **Reginæ.** (*L.* viii. t. 382.) Flowers blood-red with darker lines. [*M. coccinea*, Linden, var.]

—— Var. **splendens.** (*R.* ser. 2. t. 26.) S. A form with large and dark magenta-purple fl.

Masdevallia Heathii. (*G. C.* 1895, xvii. 594.) G. A garden hybrid between *M. reitchiana* and *M. ignea superba*.

Masdevallia Henriettæ. (*G. C.* 1893, xiii. 740; *L.* xii. t. 557.) G. A garden hybrid between *M. caudata* and *M. ignea*.

Masdevallia hieroglyphica. (*G. C.* 1882, xviii. 230.) G. A distinct form, having the upper sep. erect and flat, with 3 dark lines and numerous dark spots, the lateral ones nearly square, marked with a dark purple-brown area and the long tails suddenly bent down. Colombia.

Masdevallia hincksiana. (*G. C.* 1887, ii. 214.) G. Garden hybrid.

Masdevallia Hubschii. (*L.* iv. 8.) [A mistake for *Maxillaria Huebschii*. Reichb. f.]

Masdevallia Hypodiscus. (*G. C.* 1878, x. 234.) G. Of the *Fenestrata* group. L. lilac-purple underneath; petiole long and bent. Fl. deep purplish violet, with a very long narrow opening on each side and numerous whitish fringed crests all over the principal veins.

Masdevallia ignea Boddærti. (*Ill. H.* 1879, t. 357.) G. The outside of the fl., the throat and upper seps. all yellow; the two lower seps. bright crimson-red with some yellowish markings. Colombia.

Masdevallia ignea massangeana. (*W. O. A.* t. 273.) G. A trifling var. with darker scarlet fl. Colombia.

—— Var. **stobartiana.** (*G. C.* 1881, xv. 136.) G. A var. with mauve-purple nerves.

Masdevallia inflata. (*G. C.* 1881, xvi. 716.) G. In the way of *M. corniculata*, but the triangular bract is much wider and shorter, keeled at the back. The fl. is shorter, very much inflated and orange-yellow.

Masdevallia Klabochorum. (*G. C.* 1876, v. 720.) G. L. oblong, obtuse. Peduncle 1-flowered. Fl. fully open, 3 in. in diam. from tip to tip of the tails, blackish grey outside, white inside, with the pet., lip, column and tails yellow. South-west America.

Masdevallia lata. (*G. C.* 1877, vii. 653.) G. In the way of *M. bicolor* and *M. atropurpurea*. Peduncle thin, 2-flowered. Fl. dark reddish brown with yellowish tails: the broad lateral sep. forming part of the tube, very concave. Central America.

Masdevallia Lawrencei. (*G. C.* 1895, xviii. 324, 388.) G. [*M. guttulata*, Reichb. f.]

Masdevallia Lehmanni. (*G. C.* 1877, viii. 38.) G. Allied to *M. polysticta*, with yellow-orange fl., rounded membranous bracts and peduncle a span high, longer than the oblong acute long-stalked l. Ecuador.

Masdevallia leontoglossa. (*G. C.* 1881, xv. 234; *B. M.* t. 7245.) G. Lemon and ochre-coloured fl. marked with dark purple spots: pet. white, with two purple streaks: lip white with purple warts and blotches. Lateral sep. united nearly to their apex. Colombia?

Masdevallia Lindeni grandiflora. (*L.* i. t. 34.) G. A fine large-flowered form, with rich rose-purple fl. Colombia. [*M. coccinea*, Linden, var.]

Masdevallia Lowii. (*G. C.* 1890, vii. 416; viii. 269, f. 44: *Gfl.* 1890, 450.) G. Allied to *M. trinema*, and with the general habit of *M. Chimæra*. Fl. 3 in. across; sep. lanceolate, acuminate, almost white, thickly spotted with purple; lip small, fleshy, maroon-purple. Colombia.

Masdevallia ludibunda. (*G. C.* 1882, xvii. 179; *Fl. and P.* 1882, 37; *L.* x. t. 472.) G. In the way of *M. Estradæ* but the tails longer, the sep. rounder, and the lip pandurate. Fl. light yellow spotted with purple: tails dark yellow. Colombia.

Masdevallia macrochila. (*Acta Hort. Petrop.* 1890, xi. 307.) G. Allied to *M. bella*, from which it differs in the lip. L. oblong-elliptic or oblong-lanceolate, 2–4 in. long, about 1 in. broad. Peduncle pendulous: fl. yellowish green, densely dotted and spotted with black; lip dull orange, almost covering the limb of the lower sep. Colombia.

Masdevallia macrura. (*G. C.* 1877, vii. 12, f. 2; *B. M.* t. 7164.) G. L. oblong, obtuse, stalked, 8–9 in. long, 2–3 in. broad. Peduncle as long as the l., 1-flowered, with a cucullate bract immediately behind the short wide tube of the perianth, whose upper lip is triangular, drawn out into a long strong tail: lower lip longer and broader, dividing into two similar tails: tails 4–6 in. long: the nerves prominent inside and covered with blunt warts. Colour light brown with dark purple-brown spots and streaks; tails light yellow. Pet., column and lip small, yellowish, with purple dots; middle lobe of lip orange-yellow. Colombia.

Masdevallia maculata flava. (*Veitch Man. Masdev.* 52.) G. A small-flowered form with the tails of an uniform tawny colour.

Masdevallia Macvitiæ. (*G. C.* 1892, xii. 744.) G. A garden hybrid between *M. tovarensis* and *M. Veitchii*.

Masdevallia marginella. (*G. C.* 1883, xx. 38.) G. L. shortly petiolate, broadly spathulate; raceme 1–2-flowered; fl. white, with the three main ribs and tails green, the latter bordered with orange, and orange inside, the lobes and tails of the fl. are very spreading and the tails about as long as the rest of the fl.

Masdevallia militaris. (*G. C.* 1880, xiii. 742.) G. L. dark green, of great substance. Fl.-tube yellow, the limb cinnabarine. Lip broad and short. The plant does not flower very freely. Colombia.

Masdevallia mooreana. (*G. C.* 1884, xxi. 408.) G. Allied to *M. elephanticeps*, but smaller. Fl. solitary, 3 in. long, yellowish or light green outside, with darker nerves and a reddish hue under the lateral sep.; inside very rough, chocolate-brown; tails long.

Masdevallia mundyana. (*G. and F.* 1891, 293.) G. A hybrid between *M. Veitchii* and *M. ignea aurantiaca*.

Masdevallia muscosa. (*G. C.* 1875, iii. 460; 1887, i. 836.) G. Fl. pale buff-yellow. Remarkable in the genus for irritability or sensitiveness in the labellum, so that, when an insect alights on it, it suddenly shuts up against the column and holds it, as it were, in a box. Colombia.

Masdevallia nidifica. (*G. C.* 1880, xii. 456.) G. A miniature species with peduncles bearing single yellow fl. with a purple tint and having very long tails. Ecuador.

Masdevallia obrieniana. (*G. C.* 1890, viii. 524.) G. A small species allied to *M. simula*, but with larger yellow fl., spotted with maroon.

Masdevallia pachyantha. (*G. C.* 1884, xxi. 174.) G. In the way of *M. Gargantua*. Fl. ochre-coloured or greenish brown with dark nerves on the upper sep. and fainter ones on the lateral ones; upper sep. triangular, with a long thick tail; lateral sep. deeply connate with shorter thick tails. Colombia.

Masdevallia Parksii. (*G. C.* 1893, xiii. 636.) G. A garden hybrid between *M. harryana* and *M. ignea*.

Masdevallia parlatoreana. (*G. C.* 1879, xi. 172.) G. Resembling *M. Veitchii*, but with a more slender peduncle and a wide interval between the very short-tailed lateral sep. Fl. light salmon-colour outside, scarlet with minute amethyst warts inside, giving that violet velvet lustre so well known in *M. Veitchii*. Colombia.

Masdevallia picturata. (*G. C.* 1882, xvii. 10.) G. A small species 2–3 in. high. Peduncles one-flowered. Ovary with wavy ribs. Sep. quite free, oblong, whitish, with green nerves and tails and spotted with blackish mauve; the lateral ones orange at the base. Venezuela.

Masdevallia platyglossa. (*G. C.* 1882, xviii. 552; *B. M.* t. 7185.) G. A small-flowered species of the *Coriacea* group, with light yellow fl., having short tails and a very broad lip full of acute warts at the top.

Masdevallia platyrhachis. (*G. C.* 1888, iv. 178, 628.) G. A distinct and remarkable species, with oblanceolate-oblong l., 2–6 in. long, ¾–1 in. broad, and a flattened scape bearing a raceme of light buff-coloured fl. with green nerves and orange bases to the side sep. The sep. scarcely combined in a tube at the base, verrucose inside. Pet. linear, brown. Lip 3-lobed, acute, 2-keeled, light yellowish brown. [*Pleurothallis platyrachis*, Rolfe, *B. M.* t. 7129.] Costa Rica.

Masdevallia polysticta crassicaudata. (*G. C.* 1882, xvii. 179.) G. A var. with short stout tails.

Masdevallia porcelliceps. (*G. C.* 1883, xix. 10.) G. A small species with yellowish fl. speckled with brown; pet. white; lips rhomboid, covered with brown warts.

Masdevallia Pourbaixii. (*L.* ix. t. 387.) G. A garden hybrid between *M. reichiana* and *M. caudata*.

Masdevallia psittacina. (*G. C.* 1876 v. 817.) G. Peduncle 1-flowered. Fl. with the 3 tails more than twice as long as the cup-shaped part. The free parts of the cupular part green, the basilar part yellow with numerous small purplish blotches; tails brownish and green at their tips; inner surface covered with innumerable acute warts. [*M. houtteana*, Reichb. f.] Colombia.

Masdevallia pulvinaris. (*G. C.* 1880, xiii. 200.) G. Remarkable for the two cushions on the lower connate sep. Fl. olive green, with purplish tails and blotches. [*Scaphosepalum pulvinare* Rolfe.] Colombia?

Masdevallia punctata. (*G. C.* 1888, iv. 323.) G. Allied to *M. saccharifolia*. Tufted; l. 3–4 in. long, ½–¾ in. broad. Scape descending, bearing a succession of small pale greenish fl. spotted with dark purple brown, the spots more or less combining at the base of the fl.; the side sep. more ochreous than the rest of the fl. and the spots minute. Tails of side sep. 1½ lin. long, of upper sep. ¼ in. long. [*Scaphosepalum punctatum*, Rolfe, *B. M.* t. 7165.]

Masdevallia pusilla. (*K. B.* 1893, 335.) G. Near *M. Troglodytes*. L. lanceolate, 6 in. long; scape 4 in. long, flexuous; fl. small, yellowish, with purple-brown blotches. Colombia.

Masdevallia Pusiola. (*G. C.* 1887, i. 140.) G. Very small, with lanceolate l. 1 in. long and small yellow fl. ¼ in. long, on capillary stalks. Colombia.

Masdevallia radiosa. (*G. C.* 1877, vii. 684.) G. In the way of *M. houtteana*. Fl. smaller than *M. Chimæra*; outside varied with brown and yellow, inside blackish-purple from being densely covered with blackish warts on a purplish ground: the upper parts of the sep. are light ochre; tails almost black. Pet. whitish, with a brown blotch at base: the muricate callus on the plate-like top dark sepia. Lip white, with a few fringes at the black apex and radiating reddish lamellæ on upper surface. Colombia.

Masdevallia reichenbachiana aurantiaca. (*G. C.* 1883, xx. 360.) G. A fine var. having rich orange lateral sep. instead of purple-brown ones.

Masdevallia Roezlii. (*G. C.* 1880, xiv. 778; *L.* i. t. 15.) G. A handsome member of the *Chimæra* group. The sep. are blackish india-purple, with

still darker warts and a very few short light purple hairs on the edges. The pet. and lip are light mauve, the former being adorned with some dark-eyed blotches. [*M. Chimæra*, Reichb. f. var.] Colombia.

—— Var. **rubra.** (*W. O. A.* t. 243.) G. A fine var. with large fl. of a creamy yellow, transversely mottled with dark chocolate-red inside and with chocolate tails 3–4 in. long. Colombia.

Masdevallia rolfeana. (*G. C.* 1890, viii. 106; *G. and F.* 1890, 428.) G. Allied to *M. demissa*, but with larger fl. coloured crimson-brown with yellow tails.

Masdevallia rosea. (*G. C.* 1880, xiii. 554, 648, 681, f. 117, 118.) G. A species with rich rose-purple fl. Colombia.

Masdevallia Rushtoni. (*O. R.* 1893, 210.) G. A garden hybrid between *M. ignea Eckhardii*, and *M. racemosa Crossii.*

Masdevallia Schlimii. (*B. M.* t. 6740: *G. C.* 1883, xix. 532, f. 80.) G. A large and rather showy species, with spathulate elliptic l. 6–12 in. long, and a 3–6-flowered scape twice as long as the l. Fl. yellow, mottled with brownish red spots, which nearly cover the two lower sep., the combined body of which is produced much beyond that of the upper sep. and is somewhat pandurate in outline; tails 1 in. long, yellow. Venezuela.

Masdevallia schrœderiana. (*J. of H.* 1890, ii. 557, f. 74.) G.

Masdevallia senilis. (*G. C.* 1886, xxiv. 489.) G. One of the *Chimæra* group, with comparatively small fl. of a reddish brown colour, covered inside with short yellow hairs; the pet. white, with mauve-brown spots, and the lip pale purple and white. [*M. Chimæra*, Reichb. f. var.]

Masdevallia Shuttleworthii xanthocorys. (*G. C.* 1882, xvii. 366.) G. A var. with the dorsal sep. nearly yellow, finely striped with brown lines. [*M. caudata*, Lindl. var. *xanthocorys.*]

Masdevallia shuttryana. (*G. C.* 1892, xi. 764.) G. A garden hybrid between *M. caudata* and *M. harryana.*

Masdevallia sororcula. (*G. C.* 1887, ii. 713.) G. Allied to *M. elephanticeps*, having a very similar fl. but the angular projection of the fissure of the lateral sep. is not developed and the lip is three-lobed. Fl. is greenish outside, with purplish dots on the nerves: inside, the upper sep. pallid, with three purple lines and the lateral sep. purple with green tails. Pet. white, with a dark purple mid-line. Lip white and purple.

Masdevallia splendida. (*G. C.* 1878, ix. 493.) G. In the way of *M. reitchiana*. Perianth-tube long and slender, with abrupt tails, rich scarlet with a violet tinge, as in *M. reitchiana*; pet. white; lip ligulate, white, with a violet disk, and a dark violet apical knob. Andes.

Masdevallia striatella. (*G. C.* 1886, xxvi. 103.) G. A small-flowered species in the way of *M. chloracea*, having a closed white perianth striped with cinnamon and going off into three short tails; the pet. lanceolate with an angle on the lower side, white, with a brown mid-line; lip lanceolate, acute, angular at the base, white with the base and apex yellow and having three purple nerves. The l. about 5 in. long, rather thick, cuneate-oblong, blunt. Colombia.

Masdevallia swertiæfolia. (*G. C.* 1880, xiv. 390.) G. A curious plant with l. like those of *Swertia perennis.* The peduncle bears one or several variously coloured fl. which at first are ochre-coloured with brown spots; after a time they get purple with the exception of the inner sides of the lateral sep. and their tails, which are yellow. [*Scaphosepalum swertiæfolium*, Rolfe.]

Masdevallia torta. (*G. C.* 1883, xix. 110.) G. A curious species with long-stalked cuneate-ligulate acute bidentate l., and broad-cupped light ochre fl. marked with purple dots and stripes: tails yellow inside, the lateral ones twisted.

Masdevallia tovarensis mooreana. (*O. R.* 1895, 7.) G. Differs from the type in having the tails of the sep. coloured orange-red.

Masdevallia triangularis. (*G. C.* 1882, xvii. 44.) G. A handsome free-flowering species. Sep. triangular, widely expanding, with long tails, ochreous, covered with light brownish purple spots, except at the yellow bases of the lateral sep. Colombia.

Masdevallia triaristella. (*G. C.* 1876, vi. 226; *B. M.* t. 6268.) G. L. terete, canaliculate, 1 in. long. Peduncle 4–5 in. long, minutely warted, 1–2-flowered. Fl. brown and yellow, 2 in. across (from end of upper to end of lower sep.). Lower sep. connate into a boat-shaped lip with a long bristle on each side; upper sep. also ending in a bristle; pet. whitish. Costa Rica.

Masdevallia trichæte. (*G. C.* 1883, xx. 360.) G. Much in the way of *M. Triglochin*, but with longer l. and smaller fl. of a rich brown-purple with orange tails, and some parts of the base orange with brown nerves. [*M. gemmata*, Reichb. f.] Colombia.

Masdevallia tricolor. (*G. C.* 1882, xviii. 102.) G. In the way of *M. Estradæ*. Tails of sep. short: lateral sep. connate; lip nearly square. Colombia.

Masdevallia tridactylites. (*G. C.* 1883, xix. 784.) G. L. very thin, semi-terete, acute, channelled. Peduncles very slender. Fl. small, the dorsal sep. yellow, the lateral ones brownish-purple; tails sigmoid, blunt, orange.

Masdevallia Triglochin. (*G. C.* 1878, viii. 648.) G. L. 1½ in. long, narrow, thick, spathulate-cuneate, acute, light glaucous green, spotted with violet beneath. Peduncle not much longer than the l., bearing several fl. in succession; sep. red, with yellow tails; pet. pale yellow, with a red blotch on the disk; lip pale, with some red on each side at base. Ecuador.

Masdevallia Troglodytes. (*B. H.* 1877, 27, t. 5.) G. Belonging to the *Chimæra* group. L. linear-lanceolate, 3-toothed at apex. Scape 1-flowered. Perianth open, ¾ in. in diam.; tails sub-equal, 1½–2 in. long; outside of fl. whitish, the inside and the tails purple-brown, mottled on the margin with yellow; lip white spotted on the sides and apex with red-brown. Colombia.

Masdevallia tubeana. (*G. C.* 1878, ix. 234.) G. L. 1 ft. long, soft, cuneate-oblong, acute, petiolate. Sep. violet-brown, with a yellowish base; tails rather long; pet., lip and column white. Ecuador.

Masdevallia urostachya. (*G. C.* 1882, xvii. 765.) G. Somewhat in the way of *M. Schlimii*, but with more numerous smaller longer-stalked fl. of a dark brown, with small orange markings.

Masdevallia veitchiana grandiflora. (*Fl. and P.* 1882, 106.) G. A form with very large fl.

Masdevallia veitchiano-Estradæ. (*G. C.* 1893, xiii. 724; *O. R.* 1893, 211.) G. A garden hybrid between the two species indicated by the name.

Masdevallia velifera. (*G. C.* 1878, x. 364.) G. A curious species. Fl. green at the base outside, shading into brown and then to yellow at the borders and tails, inside brown with yellow borders; pet. light green; lip dark brownish purple. The whole fl. shining as if varnished. Colombia?

Masdevallia Vespertilio. (*G. C.* 1877, vii. 272; 1880, xiii. 712.) G. In the way of *M. nycterina*. Sep. pale yellow, blotched with brownish purple. Pet. small, yellow and brown; lip extended in a very broad transverse keelless epichile; hypochile small, with a nearly horseshoe-like angular blunt keel. Column white, projecting in a fringed appendage over the anther. Sep. with numerous yellow bristles inside, and with yellow tails longer than their body. Ovary with 6 dark green crenate wings. Colombia.

Masdevallia Wallisii discoidea. (*G. C.* 1881, xvi. 166.) G. A pretty var. with a white disk at the apex of each sep.; the blotches are larger, the brown more tinged with purple, and the beard stronger. [*M. Chimæra*. Reichb. f. var.]

—— Var. **stupenda.** (*G. C.* 1885, xxiii. 270, 473. f. 85.) G. A var. with very large fl. which have a light sulphur ground-colour spotted with chocolate, and with chocolate tails. [*M. Chimæra*, Reichb. f. var.]

Masdevallia wendlandiana. (*G. C.* 1887, i. 174.) G. A small white-flowered species. L. spathulate, minutely bilobed. Peduncle 1-flowered; fl. ¾ in. long, white, with 2–3 mauve lines outside beneath; tails equal to the free part of the sep. Colombia.

Masdevallia winniana. (*G. C.* 1881, xvi. 198.) G. Much in the way of *M. Roezlii*, but larger, lighter in colour, with more gradually tapering sep. and an erect peduncle.

Masdevallia xanthina. (*G. C.* 1880, xiii. 681.) G. This has been mistaken for *M. wageneriana*. It differs in the blade of the lip being square and entire, not triangular and toothed. Fl. yellow, dark violet at the base of the even sep.; the small pet. whitish. Lip yellowish, with a dark knob at the apex. Colombia.

Masdevallia xanthodactyla. (*G. C.* 1877, viii. 552.) G. In the way of *M. melanopus*, from which it is well distinguished by its very long pedicels, much longer than the bracts, by the 1-nerved front lobe of the lip, and by its different pet., which latter are serrated towards their upper edge and have a membranous crest under the middle vein. Fl. greenish white, with yellow tails, having a violet spot at base of fl. and on both sides of the chin.

Massangea hieroglyphica. (*R. H.* 1878, 175.) Bromeliaceæ. S. Resembling *Tillandsia musaica*, but much larger, with l. about 2½ ft. long and 5-6 in. broad, concave, arched, dark green, marked with transverse violet-black bands, which are broken up into spots and are most distinct on the lower surface. [*Tillandsia hieroglyphica*, Baker.] Brazil.

Massangea Lindeni. (*Ill. H.* 1878, t. 309.) S. Allied to *M. musaica*, with longer sub-erect l., of a lightish green, transversely banded by numerous irregularly broken lines of a dark violet-brown. [*Caraguata Lindeni*, Baker.] Peru.

Massangea musaica. (*B. H.* 1877, 192. t. 8. 9.) A new name for the well-known *Tillandsia musaica*. [*Caraguata musaica*, André.]

Massonia amygdalina. (*G. C.* 1889, vi. 715.) Liliaceæ. G. A small flowered terrestrial plant. L. ovate: fl. in a dense head, white, almond-scented. South Africa.

Massonia jasminiflora. (*B. M.* t. 7465.) G. This plant was discovered at the beginning of the century by the celebrated traveller Burchell, but until recently reintroduced it had only been known from a single dried specimen from his garden at Fulham in 1818, and preserved in the Kew Herbarium. L. two to a bulb, spreading on the surface of the ground. Umbel of white green-tipped fl., sessile in the centre of the two l. Orange Free State.

Massowia Gardneri. (*G. C.* 1878, x. 622.) Araceæ. [*Spathiphyllum candidum*, N. E. Br.]

Matricaria eximia grandiflora aurea. (*R. H.* 1888, 163.) Compositæ. H. [*Chrysanthemum Parthenium*, Bernh. var.]

—— Var. **pyramidalis.** (*R. H.* 1886, 557, f. 131.) H. A form of compact and somewhat pyramidal habit.

Maxillaria arachnites. (*G. C.* 1880, xiii. 394.) Orchidaceæ. G. Fl. yellowish, its acute segments bent and twisted. Lip ochre-coloured, with many short streaks and lines, with pellucid hairs on both sides, and several in front of the callus on the lip and disk; border purple. Colombia.

Maxillaria crocea Lietzei. (*Regel. Descr.* 10.) G. A var. having the scapes shorter than the l.; lip oblong, obsoletely 3-lobed, the middle lobe entire: disk papillose-pubescent, yellow, with the margin and outside purple-brown. Brazil.

Maxillaria Endresii. (*G. C.* 1886, xxv. 680.) G. Something in the way of *M. setigera*, with very broad elliptic pseudobulbs. L. cuneate-ligulate, acute. Peduncle rather short. Sep. and pet. triangular-ligulate, acuminate, aristate, light ochreous. Lip ochre-coloured, with a yellow disk, and purple border and veins on the side lobes; callus triangular, depressed.

Maxillaria fractiflexa. (*G. C.* 1881, xv. 656.) G. The sep. and pet. drawn out into long curved and twisted tails 6 in. or more in length, the tails and basal parts purple; disk white: lip white and red.

Maxillaria fucata. (*G. C.* 1886, xxvi. 616.) G. Allied to *M. irrorata*, but with no powder on the lip. L. oblong-lanceolate, acuminate, 8–9 in. long, on petioles 5–7 in. long. Peduncles a span long, with many sheaths. Sep. triangular, the lateral ones broadest, with reflexed tips, white outside; inside white at base, purple in the middle, and yellow with red spots at

apex. Pet. rhomboid, blunt-angled at the sides, coloured like the sep., but without the apical spots. Lip oblong-elliptic, trifid in front, side lobes rounded, mid lobe small, semi-oblong, emarginate, ochreous, marked with brown stripes, and with brown margins to the side lobes.

Maxillaria fuscata. (*G. C.* 1888, iv. 576–7, f. 81.) A misprint for *M. fucata*.

Maxillaria Huebschii. (*G. C.* 1888, iii. 136; *O.* 1888, 193.) G. Allied to *M. fucata*, which it resembles in appearance. Fl. white; lateral sep. rounded: pet. linear rhombic, acute; lip transverse, rhombic, with a transverse emarginate yellow tubercle on the disk, and some hairs behind it. The margin inside is mauve-purple, and there are some spots of the same colour outside at the base.

Maxillaria irrorata. (*G. C.* 1883, xx. 102.) G. Peduncle covered with broad sheaths. Fl. about 1 in. long, white, washed, bordered and blotched with purple; lip ochre, with a purple margin and two purple spots underneath. Andes.

Maxillaria Kalbreyeri. (*G. C.* 1885, xxiii. 239.) G. Something in the way of *M. venusta*. L. oblong ligulate, a span high, 1 in. broad. Upper sep. and pet. ligulate, acute. Side sep. triangular, acute: lip oblong-ligulate, toothed on the front margins. Fl. pale greenish white; lip mealy, with some purple on the outside of the upper margins. Colombia.

Maxillaria Lehmanni. (*G. C.* 1886, xxv. 648.) G. A fine showy species with white fl. Side lobes of lip light reddish brown inside, and covered with fragile hairs, pale ochre outside with dark chestnut veins; front lobe triangular, wavy and sulphur-coloured.

Maxillaria lepidota. (*G. C.* 1878, ix. 168.) G. In the way of *M. venusta*, but with smaller light yellow fl. Colombia.

Maxillaria Lindeniæ. (*J. O.* 1894, 362; *L.* x. t. 464.) G. A large-flowered species with somewhat fleshy milk-white acuminate sep.; pet. the same colour as the sep., but with two or three pale rose-coloured lines; lip very pale yellow, with five or six reddish bands on the lateral lobes.

Maxillaria longisepala. (*G. C.* 1890, viii. 94; *L.* vi. t. 248.) G. Allied to *M. pentura*, but fl. larger and coloured purple-brown; lip greenish. Venezuela.

Maxillaria mirabilis. (*L.* ix. t. 417; *O. R.* 1894, 75.) G. Allied to *M. fucata*. Pseudobulbs small, compressed; l. linear-oblong, 12 in. long; scapes 8 in. long, each bearing a single fl. 2 in. across; sep. reflexed, orange and crimson, spotted with dark brown; pet. much smaller, yellow with red-brown spots and lines; lip yellow, with a marginal row of spots.

Maxillaria Molitor. (*G. C.* 1887, ii. 242.) G. Allied to *M. grandiflora*, with similar pseudobulbs and l., but smaller fl. Sep. acute, yellow, tinged with brown on the upper halves outside; pet. smaller, oblong-lanceolate, yellow. Lip with rounded yellow side lobes, dotted on the margin with brown, and a triangular obtuse wavy brown front lobe: disk mealy, with a crescent-shaped naked crest.

Maxillaria mooreana. (*K. B.* 1895, 36.) G. Allied to *M. grandiflora*. Fl. cream-coloured, with maroon-purple stripes on each pet. and a farinaceous lip. margined with purple. Guatemala.

Maxillaria Muelleri. (*Gfl.* 1890, 574: *Acta Hort. Petrop.* 1890, xi. 307.) G. In the way of *M. refulgens*, with somewhat compressed 2-angled pseudobulbs bearing solitary leathery l. about 6 in. long by 1 in. broad. Scape 1-flowered, with 2 inflated bracts. Sep. and pet. clear yellow; lip yellow, dotted with purple. [Syn. *M. squamata*, Hort.]

Maxillaria neophylla. (*G. C.* 1879, x. 588.) G. Pseudobulbs small, rugose, lenticular, bearing one long-stalked l. 2½ in. long, ¾ in. broad, very strong and thick. Peduncle covered with dark brown sheaths; bract very wide, covering the base of the fl.: chin small: sep. and pet. acuminate, pale yellow, with numerous brown spots: lip trifid. Colombia.

Maxillaria parva. (*K. B.* 1895, 193.) G. Allied to *M. pumila*. Pseudobulbs small: l. 1 in. long; fl. yellow, borne on a short scape. Brazil.

Maxillaria præstans. (*G. C.* 1885, xxiii. 566.) G. Pseudobulbs oblong, 2-edged. L. cuneate-ligulate, bluntish. Fl. dull yellow, with brown spots at

the base of the segments. Seg. ligulate, acute; pet. shorter, acuminate. Lip 3-lobed; side lobes short; middle lobe cuneate-oblong, acute, very thick, brownish-yellow, with small brown spots. Guatemala.

Maxillaria sanderiana. (*R.* ser. 1, t. 25; *G. C.* 1887, i. 485.) G. Pseudobulbs compressed, one-leaved. L. stalked, broadly oblong, obtuse, apiculate. Fl. 4–5 in. in expanse, ivory white, with the base of the sep. and pet. and the outside of lip dark vinous-crimson. On the sep. and pet. the upper part of the crimson breaks up into spots and streaks. The inside of the lip is yellowish, with vinous-crimson spots. Peru.

—— Var. **fuerstenbergiana.** (*G. C.* 1894, xv. 526.) G. A var. in which the fl. are ivory white, with only very few pale purplish spots on the pet.

—— Var. **xanthoglossa.** (*J. of H.* 1893, xxvi. 494, 89.) G. A var. with an exceptional number of crimson spots on the segments and a yellowish lip.

Maxillaria sanguinea. (*K. B.* 1895. 8.) G. Allied to *M. tenuifolia*, which it resembles in habit, differing in having dull red-brown and yellow fl. with a purple-crimson lip. Chiriqui. Colombia.

Maxillaria speciosa. (*G. C.* 1876, vi. 164.) G. Peduncle 1-flowered. Fl. pallid and covered with numerous blackish purple spots; sep. and pet. narrow, acuminate, spreading, 5–6 in. long. Colombia.

Maxillaria striata. (*O. R.* 1893, 266; *L.* ix. t. 398.) G. Habit of *M. venusta*. Fl. large, 5 in. across; sep. and pet. greenish yellow, with brown purple stripes; lip white with amethyst-purple vein-like lines. Peru.

—— Var. **grandiflora.** (*G. C.* 1896. xx. 310.) G. Fl. larger than the type, white with purple lines.

Maxillaria varicosa. (*G. C.* 1883, xx. 392.) G. Allied to *M. corrugata*, having fusiform furrowed pseudobulbs about 3 in. long, petiolate oblong-ligulate acuminate l. 1 ft. or more long by 2 in. broad, and a few-flowered raceme of fl. similar to those of *M. corrugata*, but with a broader lip. Bolivia.

Meconopsis quintuplinervia. (*Gfl.* t. 880, f. b–d.) Papaveraceæ. H. (?) herb of dwarf habit. L. all radical, lanceolate, attenuate at the base into a rather long petiole, 5-nerved, green, covered with reddish hairs. Scape 4–9 in. high, 1-flowered, hairy like the l. Fl. nodding, about 1½ in. long and the same in diam., cup-shaped; pet. 4, rhomboid-ovate, violet. Stamens numerous, the inner ones twice as long as the outer. Pistil shorter than the short stamens. Manchuria.

Meconopsis Wallichii. (*Bull Cat.* 1876, 10.) H. per. with large drooping fl. in an elongated leafy raceme 2 in. in diam., pale clear blue; stamens very numerous, orange-yellow. Figured at *B. M.* t. 4668. Himalaya.

—— Var. **fusco-purpurea.** (*B. M.* t. 6760.) H. A tall hairy herb with large bipinnatifid stalked radical l., sessile oblong sub-pinnatifid stem-l. and a lax panicle of nodding brownish purple fl. 2–3 in. in diam. Eastern Himalaya.

Medinilla Curtisii. (*Veitch Cat.* 1884, 15, f. 9; *G. C.* 1883, xx. 621, f. 108; *Fl. and P.* 1883, 169; *B. M.* t. 6730.) Melastomaceæ. S. A handsome free-flowering shr. of dwarf habit, with opposite elliptic acute rather fleshy three-nerved l., and terminal panicles of white fl., the peduncles and pedicels being coral-red, and the stamens purple. Sumatra.

Medinilla magnifica rubra. (*W. G.* 1888, 155.) S. Var. with dark coloured fl.

Megaclinium Clarkei. (*K. B.* 1891, 198.) Orchidaceæ. S. Pseudobulbs 1 in. long, bearing two oblong obtuse l., and a flattened fl.-spike; fl. small, green and purple. West tropical Africa.

Megaclinium imschootianum. (*K. B.* 1895, 8.) S. Allied to *M. oxypterum*, but fl. less crowded. L. 6 in. long; scape 10 in. long; fl. small, yellowish green, with brown spots. Tropical Africa?

Megaclinium leucorhachis. (*K. B.* 1891, 198.) S. Pseudobulbs with one linear-oblong obtuse l.; fl.-spike flat, nearly white, with deep yellow fl. Tropical Africa?

Megaclinium minutum. (*B. M.* t. 7314 ; *K. B.* 1893, 5.) S. A diminutive species with a creeping rhizome, small ovate pseudobulbs bearing each a pair of small l. Scape short, flattened, purple, with two rows of small orange-red fl. Sierra Leone.

Megaclinium Nummularia. (*G. C.* 1894, xv. 685.) S. Closely allied to *M. minutum*, but with flattened pseudobulbs : l. 1 in. long ; raceme shorter, with 6-8 minute purplish fl. Cameroons.

Megaclinium oxyodon. (*G. C.* 1888, iv. 91 ; *H. G.* 1888. 398.) S. A small plant with a creeping rhizome, spherical 4-angled dark green punctate wrinkled pseudobulbs bearing 2 lanceolate acute l. 2 in. long by ½ in. broad, and a flat peduncle ⅓ in. broad, of a light green colour. Fl. like those of *M. falcatum*, but pet. longer and more arched ; lip membranous, 3-lobed. [Syn. *Bulbophyllum Oxyodon*, Reichb. f.] Madagascar.

Megaclinium pusillum. (*K. B.* 1894, 362.) S. Allied to *M. melanorhachis*. Pseudobulbs ovoid, 1 in. long ; l. linear-oblong, 3 in. long ; scape 4 in. long, flattened, bearing small green and purple fl. East Tropical Africa.

Megaclinium scaberulum. (*G. C.* 1888, iv. 6 ; *H. G.* 1888, 397.) S. A small plant with creeping rhizomes, tetragonal pseudobulbs bearing two elliptic-oblong l., 2 in. or more long, and an erect infl. 3–4 in. long ; fl.-bearing part of the peduncle flat and about ¼ in. broad, densely spotted and marbled with dusky purple, and bearing several fl. on each side. Flowers rough outside, of a dull purple colour, with the base of the sep. whitish green spotted with purple. Pondoland.

Megaclinium triste. (*K. B.* 1894, 363.) S. Allied to *M. leucorhachis*. Pseudobulbs trigonous, oblong, 2 in. long ; l. fleshy, oblong, 5 in. long ; scape about 1 ft. long, fleshy, club-shaped, black-purple, and bearing numerous small black purple fl. Tropical Africa ?

Megarrhiza californica. (*G. C.* 1881, xiv. 792, f. 155.) Cucurbitaceæ. H. H. tuberous per., producing climbing annual stems 20–30 ft. long. The l. are palmately lobed, glossy and silvery. The male fl. are in racemes, the female solitary. The fruits are about 2 in. long, roundish or oblong, and thickly covered with spines. The seeds are about as large as a bean. [*Echinocystis fabacea*, Naud.] California.

Melampodium ovatifolium. (*B. T. O.* 1891, 111.) Compositæ. H. annual. [*M. paludosum*, H. B. K.]

Melhania melanoxylon. (*G. C.* 1890, vii. 512. 81.) Sterculiaceæ. S. A shrubby tree, formerly native of St. Helena, but now extinct. It survived for some time in cultivation in European gardens, but is now completely lost.

Melia Azedarach umbraculifera. (*G. and F.* 1894, 92, f. 20.) Meliaceæ. G. The characteristic habit of this var. is signalized by its name.

Melianthus trimenianus. (*B. M.* t. 6557.) Sapindaceæ. G. An evergreen shr. L. pinnate, 3–5 in. long ; leaflets 6–10 pairs, linear. Racemes terminal, 4–8 in. long. Fl. in whorls of 4–6. Calyx oblique, green. Pet. 4, linear-lanceolate, wavy, scarlet. Fruit 4-winged. [*M. pectinatus*, Harv.] Namaqualand.

Melica papilionacea. (*B. H.* 1890, 295.) Gramineæ. H. H. grass with tufts of fine l., and narrow slender panicles of purplish spikelets. Argentina ; Brazil.

Melothria abyssinica. (*B. T. O.* 1893, 13, f. 2.) Cucurbitaceæ. G. or S. A per. climber with very small yellowish fl. followed by small round orange-coloured fruits produced in great profusion in autumn. Abyssinia.

Melothria punctata. (*B. T. O.* 1890, 100, f. 13.)

Mentzelia lævicaulis. (*W. G.* 1890. 400.) Loasaceæ. H. annual with lanceolate sinuate-pinnatifid l., and showy large yellow fl. opening in the morning and closing at night. California.

Menziesia glabella. (*H. G.* 1888, 559.) Ericaceæ. H. shr. very similar to *M. globularis*, but the filaments are ciliate, and the seeds have appendages at each end. L. lanceolate, obtuse, glaucescent and nearly or quite glabrous beneath, sparsely hairy above, ciliolate. Fl. in terminal umbels ; corolla ovoid-campanulate, lurid-purple. Rocky mountains.

Merendera caucasica ruthenica. (*G. and F.* 1888, 138.) Liliaceæ. H. bulb, flowering before the narrow l. appear. Fl. Crocus-like, bright carmine-purple. Transylvania.

Meryta sonchifolia. (*Ill. H.* 1879, t. 340.) Araliaceæ. S. shr. with ornamental foliage. Stem olive green, with fine blackish lines; petioles olive green, with blackish lenticels. L. lyrate-pinnatisect; terminal lobe deltoid or somewhat 3-lobed, acuminate; side lobes rhomboid, ovate, acute; margins irregularly toothed, dark green, marked with numerous whitish spots. New Caledonia.

Mesembryanthemum Bolusii. (*B. M.* t. 6664.) Ficoideæ. G. succulent of extraordinary appearance, consisting of two large fleshy trigonous keeled truncate l. of a pale glaucous green, dotted with dark green, and producing a large sessile fl. between them: the very narrow numerous pet. yellow in their lower half, red in the upper half, spreading over the top of the plant. South Africa.

Mesembryanthemum Brownii. (*B. M.* t. 6985: *G. C.* 1883, iii. 305.) G. A showy species, allied to *M. polyanthon*, and equally free-flowering. Stems erect, much branched. L. $\frac{1}{2}$–$\frac{2}{3}$ in. long, subterete, in distant pairs, glaucous green. Fl. terminal, 1 in. in diam., of a brilliant orange red or purple. South Africa.

Mesembryanthemum Cooperi. (*B. M.* t. 6312.) G. Of dwarf habit, with showy fl., much branched: the stem, l., and calyx covered with glittering papillæ. L. opposite, close set, 1½ in. long, semi-terete, sub-acute the papillæ in regular rows. Peduncle solitary or terete, terminal, short. Fl. 2 in. in diam.: calyx-tube obconic: lobes five, unequal, spreading, semi-terete. Pet. 1-seriate, narrow-linear, rose-purple, twice as long as the calyx-lobes. Staminodes $\frac{1}{4}$–$\frac{1}{3}$ as long as the pet., rose-purple, filiform. Stamens densely crowned, yellow. Stigmas five, erect, ovate-lanceolate, apiculate. South Africa.

Mesembryanthemum ficiforme. (*G. C.* 1876, vi. 772.) G. Not a new plant, but has been cultivated under a wrong name, viz., *M. nuciforme*. Plant 1 in. high, $\frac{3}{4}$ in. thick, obcordate, whitish green. Fl. just exserted from the notch at the apex of the plant, 1 in. in diam., opening in the afternoon, sweet-scented. Pet. narrow-linear, bright pink. South Africa.

Mesembryanthemum hirtum. (*G. C.* 1878, x. 138, f. 19.) G. Stems short, hairy, decumbent; l. linear, semi-terete, hairy; fl. large, bright purple, with numerous yellow stamens. South Africa.

Mesembryanthemum setuliferum. (*G. C.* 1876, vi. 8.) G. shr., with slender rough stems. L. fleshy, terete, covered with setuliferous papillæ and bearing a tuft of white radiating hairs at the apex. Fl. solitary in the forkings of the branches, bright violet-purple. South Africa.

Mesembryanthemum Sutherlandii. (*B. M.* t. 6299.) G. succulent per. of dwarf habit, minutely papillose-setose. Stems annual, 3–6 in. long, branching at the base. L. opposite, 2–3 in. long, oblanceolate, acute, spreading, slightly concave above, convex beneath, green. Peduncles terminal, solitary or ternate, stout, 1½–3 in. long. Calyx-tube hemispheric, the lobes unequal, subtriquetrous, spreading. Corolla 2 in. in diam.; pet. numerous, uniseriate, linear-obtuse, bright pale purple. Stamens yellow, the outer without anthers. Stigmas 5, tumid and papillose, terminated by a long arista. Natal.

Mesembryanthemum vittatum. (*G. C.* 1876, vi. 772.) G. succulent of very dwarf cæspitose habit. L. glabrous, 6–8, erect, 1–1¼ in. long, semi-terete, keeled at the acute apex, green, covered with numerous raised dots. Peduncle 1-flowered, about as long as the l. Calyx obconic, with 5 equal deltoid acute lobes, 3–4 lines long. Pet. scarcely longer than calyx-lobes, in 2–3 series, linear, obtuse, entire, bright shining yellow, paler on the back, with a narrow red line down the centre on both sides. Stamens white. Stigmas 7, compressed, erect. South Africa.

Mesospinidium incantans. (*G. C.* 1880, xiii. 586.) Orchidaceæ. G. An interesting species. Sep. and pet. ochre-coloured, with brown blotches. Lip white, with an ochre-coloured callus and many small brown dots. Colombia.

Mesospinidium jucundum. (*G. C.* 1876, vi. 580.) G. Fl. racemose, small, bright green, marked with a few brown stripes and spots; column hairy, with bidentate staminodes; anther-case hairy, ascending into a beak. Brazil.

Metrosideros floribunda alba. (*Williams' Cat.* 1885, 9.) G. Myrtaceæ. A var. with white fl.

Michauxia Tschihatchewii. (*Fl.* 1896, 173; *G. C.* 1897, xxi. 182, f.) Campanulaceæ. H. A handsome biennial attaining a height of 6 ft. and bearing large numbers of white Martagon-Lily-like fl. Radical l. long-stalked. Asia Minor.

Miconia velutina. (*Ill. H.* 1894, t. 21.) Melastomaceæ. S. A foliage plant with brownish red stems, red l.-stalks: l. large, green above and purple-red beneath. Brazil.

Miconia vesicaria. (*Ill. H.* 1895, 187.) S. L. ciliated, ovate, about 6 in. long, deep green shaded with violet. Peru.

Microglossa albescens. (*B. M.* t. 6672; *Fl. and P.* 1883, 42.) Compositæ. H. shr. per. with alternate lanceolate acuminate l., and terminal corymbs of numerous small blue Aster-like fl. Himalaya.

Microphœnix Sahuti. (*R. H.* 1885, 513, f. 91. Palmæ. G. A hybrid between *Microphœnix decipiens* and *Trachycarpus excelsa*, having the habit and foliage of the former, with the violet-tinted petioles and fruit of the latter. The fruits are about ¾ in. long, elliptic, of a reddish brown colour.

Microstylis bella. (*G. C.* 1886, xxv. 9: *Ill. H.* 1885, t. 581: *Cat. Comp. Cont. d'Hort.* 1886, 4.) Orchidaceæ. S. A large species nearly 2 ft. high, with large cuneate-oblong undulate l. and a raceme of numerous pale purple fl.: sep. tipped with green: lip with long sagittate ears, and nine small teeth at the top. [*M. plantaginea*, Steud.] Sunda Isles.

Microstylis calophylla. (*G. C.* 1879, xii. 718.) S. Fl. yellow. Sep. oblong, obtuse, three-nerved. Pet. one-nerved. Lip purple at base. Java.

Microstylis chlorophrys. (*G. C.* 1881, xv. 266; *Bull Cat.* 1881, 19.) S. L. oblong, acute, wavy, brown above with green borders, purple beneath. Peduncle light rose with purple ribs. Fl. purple, with ochre-coloured ears to the sagittate lip. Borneo.

Microstylis josephiana. (*B. M.* t. 6325.) S. Pseudobulbs tufted, the young ones with about 3 oblong acuminate plaited l., coppery above, green beneath. Scape 6-angled, 8–10 in. high, 3–12-flowered. Fl. yellow, tinged with copper-colour, with some red-brown spots inside the lip: sep. broadly ovate, revolute, obtuse apiculate; lateral ones connate for half their length; pet. linear, acute, revolute; lip forming an orbicular hood. Sikkim Himalaya.

Microstylis Lowi. (*B. H.* 1884, 281, t. 14, f. 2.) S. A beautiful little plant, with dark coppery brown l. marked with a broad whitish central band; margins undulate. Peduncle rosy-purple; fl. purple, with the ears of the sagittate labellum ochraceous. Borneo.

Microstylis macrochila. (*K. B.* 1895, 6: *G. C.* 1895, xviii. 325, f. 60.) S. The l. are almost identical with those of *M. Scottii*, coloured light brown with a marginal band of light yellow; scape 8 in. long; fl. very large for the genus; lip ½ in. wide. Malaya.

Microstylis metallica. (*G. C.* 1880, xii. 750; *B. M.* t. 6668.) S. L. oblong, acute, of a light rose-colour beneath, blackish-purple above, with a metallic lustre. Odd sep. yellow; lateral sep., pet., and lip rose-colour: blade of lip square, with numerous short teeth on the front side. Borneo.

Microstylis Scottii. (*B. M.* t. 7268.) S. A dwarf species with fleshy green stems. L. deciduous, lanceolate, 5 in. long, wavy, brown with a green marginal band. Scapes erect, 6 in. long, bearing numerous small green and purple fl. Malaya.

Microstylis trilobulata. (*G. C.* 1882, xviii. 393.) S. An unattractive species, with a few elliptic light green l., and a raceme of small brownish purple fl. [*M. congesta*, Reichb. f.] Tropical Asia.

Microstylis Ventilabrum. (*G. C.* 1881, xvi. 717.) S. A fine species with light green l., having brownish-tinted veins, and yellow fl. with a large square lip, sagittate at the base, and having 7–9 teeth at the top. Sunda Isles.

Milletia megasperma. (*B. M.* t. 6541.) Leguminosæ. G. Evergreen woody climber with the habit of *Wistaria sinensis*. L. pinnate, glabrous, glossy, dark green. Fl. purple in lax-panicled pendulous racemes. Queensland.

Miltonia Bleui. (*L.* iv. t. 176.) Orchidaceæ. S. Garden hybrid between *M. vexillaria* and *M. Roezlii*. [Syn. *M. bleuana*, Linden ; *Odontoglossum Bleui*, God.-Leb.]

Miltonia bleuana nobilior. (*G. C.* 1894, xv. 366 ; *O. R.* 1894, 355, f.) S. A handsome var. of a garden hybrid between *M. vexillaria* and *M. Roezlii*. [*M. Bleui*, God.-Leb. var.]

—— Var. **rosea.** (*G. C.* 1894, xvi. 511.) S. A handsome var., the fl. being blush white with an eye-like purple blotch and red lines in the blotch.

Miltonia Bluntii. (*G. C.* 1879, xii. 489.) S. Sep. and pet. whitish yellow, blotched with purple-cinnamon. Lip like that of *M. spectabilis*, white with a purple base. A supposed natural hybrid. Brazil.

—— Var. **lubbersiana.** (*G. C.* 1887, ii. 649.) S. A var. spotted with brown on the sep. and pet., and having a purple lip.

Miltonia Clowesii gigantea. (*G. C.* 1892, xii. 552.) S. A var. with shorter scapes and larger fl. than the type.

—— Var. **lamarckeana.** (*B. H.* 1876, t. 13.) [*M. lamarckeana*, Reichb. f., which see.]

Miltonia flavescens grandiflora. (*Gfl.* t. 1328.) S. Differs from the type by its larger and paler yellowish flowers. Minas Geraes. Brazil.

—— Var. **stellata.** (*Gfl.* t. 1328.) S. Differs from type in its rufescent bracts and white lip. [*Cyrtochilum stellatum*, Lindl.] Minas Geraes. Brazil.

Miltonia joiceyana. (*G. C.* 1893, xiv. 206.) S. Supposed to be a natural hybrid between *M. Clowesii* and *M. candida*. It has fl. 3 in. across, yellow, with brown blotches. Brazil.

Miltonia lamarckeana. (*G. C.* 1881, xv. 530.) S. In the way of *M. candida*. Sep. and pet. yellow, with broad cinnamon bars. Lip cordate at base, abruptly broader from the middle : base with an obscure globular tumour ; front part with 7 keels, whitish ochre, with a broad pandurate blotch before the keels. Probably a hybrid between *M. candida* and *M. Clowesii*. [Syn. *M. Clowesii*, Lindl. var. *lamarckeana*, Hort. : *B. H.* 1876, t. 13.]

Miltonia petersiana. (*G. C.* 1886, xxvi. 326.) S. A handsome plant with the bulb and l. of *M. Clowesii*, and fl. like that of *M. spectabilis moreliana*, but the sep. are narrower, more acute, and of a fine brown-purple colour ; the lip is narrower at the base and dilated suddenly and acutely below the tip ; it is of a rich purple colour with five unequal yellow keels at the base, and numerous dark purple pale-edged blotches on the base and inside line of the disk. Probably a natural hybrid between *M. moreliana* and *M. Clowesii*.

—— Var. **concolor.** (*G. C.* 1886, xxvi. 360.) S. Var. with paler sep. and pet. than the type and without the dark eye-spots on the lip.

Miltonia Regnellii purpurea. (*B. H. B.* 1891, 253, t. ; *F. M.* t. 490.) S. A fine var. with bright purple fl. marked with darker veins on the lip. Brazil.

Miltonia schrœderiana. (*G. C.* 1889, vi. 210 ; *W. O. A.* t. 382.) [Syn. *Odontoglossum schrœderianum*, Reichb. f.]

Miltonia spectabilis aspersa. (*G. C.* 1885, xxiv. 70.) S. An interesting var. with cream-coloured sep. and pet. partly washed with mauve-lilac : lip light mauve-lilac with a large keel.

—— Var. **lineata.** (*L.* ii. t. 62.) S. A handsome var. with a large purple blotch at the base of the lip and seven purple veins radiating from it nearly to the margin.

—— Var. **moreliana.** (*L.* iii. t. 105 ; *W. O. A.* t. 364.) S. [Syn. *M. moreliana*, Hort.]

—— Vâr. **moreliana radians.** (*W. O. A.* t. 164 ; *G. C.* 1880, xiv. 166.) S. Fl. warm purple, with white borders to the sep. and pet. ; the lip purple with nine radiating yellow lines.

—— Var. **moreliana rosea.** (*G. C.* 1880, xiv. 166.) S. Fl. light rosy-tinted with a purple lip.

Miltonia vexillaria Leopoldii. (*G. C.* 1889, vi. 334 ; *R. H. B.* 1891. 73 t.) S. Fl. richly coloured, with a very dark triangular blotch at the base of the lip.

Miltonia vexillaria purpurea. (*G. C.* 1889, v. 471.) S. A var. with very deep-coloured fl.

—— Var. **sanderiana.** (*G. C.* 1891, x. 394; *G. and F.* iv. 545.) S. [*M. vexillaria*. Reichb. f. var. *Leopoldii*. Hort. which see.]

Miltonia Warscewiczii ætheria. (*G. C.* 1881, xv. 428.) S. A curious var. with very light sep. and pet. with white tips; lip white with a light yellow area bordered and based with very light mauve-lilac.

—— Var. **xanthina.** (*G. C.* 1884, xx. 812.) S. A var. with deep yellow sep. and pet. and a light yellow lip with a white border.

Miltoniopsis Bleui. (*O.* 1889, 145, t.) S. [*Miltonia Bleui*, God.-Leb. which see.]

Mimosa Spegazinii. (*B. T. O.* 1892. 163.) Leguminosæ. G. shr. A Sensitive Plant, armed with prickles at the base of the l., which have but one pair of pinnæ, bearing numerous leaflets. Fl. in globose heads in terminal racemes, with pale violet stamens. Pods 3–4-seeded, prickly. Argentina.

Mimulus Clevelandi. (*G. and F.* 1895, 134, f. 20.) Scrophulariaceæ. G. per. suffrutescent at base, with glandular-pubescent lanceolate serrate l. and golden yellow fl. Southern California.

Mimulus Fremonti. (*Fl. and P.* 1882. 12.) H. H. or G. per. Stems 2–4 in. high. L. spathulate or oblong. Fl. ¾ in. long, with spreading limb, crimson. California.

Mimulus mohavensis. (*Gfl.* 1886, 99.) H. A pretty little annual 2–3 in. high, minutely viscid-pubescent. L. oblong-lanceolate, acute, entire, reddish. Calyx-tube ½ in. long. Corolla with a stout tube scarcely longer than the calyx and a very spreading limb, ½ in. in diam., whitish, with a dark crimson eye. California.

Mimulus primuloides. (*Gfl.* t. 1009.) H. dwarf herb. per. Stems very short and tufted. L. lanceolate or elliptic-lanceolate, more or less toothed, ciliate, 3-nerved. Peduncles much overtopping the l., 3–4 in. long, slender. Fl. ¾ in. in diam., light yellow, with some orange dots on the lower lip. Corolla deeply 5-lobed; lobes rather deeply bifid. California.

Mimulus radicans. (*G. C.* 1883, xx. 21, f. 6; *Fl. and P.* 1883, 108.) H. bog-plant having a creeping stem with short leafy branches; l. small, densely packed, obovate, obtuse, hairy or glabrous, ¼ in. long; peduncles about as long as the l.; fl. white, with a violet blotch, ½–¾ in. across; upper lip small bifid; lower large and 3-lobed. New Zealand.

Mirabilis multiflora. (*B. M.* t. 6266.) Nyctaginaceæ. H. H. Everywhere glandular-pubescent. Stem tall, much branched. L. 3–4 in. long, opposite, stalked, ovate or cordate, acute. Panicles terminal, large. Fl. 4–7 together in a green bell-shaped shortly 5-lobed involucre. Perianth bright purple: tube green, 2 in. long: limb spreading, 1½ in. in diam., 5-lobed. Stamens and style exserted, white. California.

Molinia Bertini. (*R. H.* 1890, 348.) Gramineæ. H. A variegated form of *M. cærulea*.

Momordica chinensis. (*B. T. O.* 1893, 14, f. 4.) Cucurbitaceæ. S. Similar to *M. Charantia*, but differing from that species in its much larger longer fruits of a silvery colour. China.

Momordica martinicensis. (*W. G.* 1888. 473.) S. annual, resembling *M. Charantia*. Very quick growing, much branched, with ornamental fr.

Momordica muricata. (*B. T. O.* 1893. 14.) S. A vigorous annual climber with pale yellow fl., and golden or orange-yellow fr. with blood-red pulp and white seeds. Peru.

Monardella macrantha. (*B. M.* t. 6270.) Labiatæ. H. H. of tufted habit, aromatic. L. opposite, small, ½–¾ in. long, stalked, ovate, obtuse, entire, green. Fl. in dense terminal bracteate heads: bracts like the l. but sessile. Calyx ½ in. long, inflated below, shortly 5-toothed, striate, tomentose. Corolla 2½–3 times as long as calyx, a little inflated above, erect, bright scarlet, shortly 5-lobed, the 2 upper erect, the 3 lower spreading. Stamens and style exserted. California.

Monnina xalapensis. (*B. M.* t. 6415.) Polygalaceæ. G. shr. with alternate oblanceolate acute or acuminate bright green l. 2–4 in. long, and copious racemes of bright blue fl.; tip of the 3-lobed keel yellow. Mexico.

Monodora grandiflora. (*B. M.* t. 7260.) Anonaceæ. S. Well known in botanic gardens but seldom flowering.

Monolophus secunda. (*Bull Cat.* 1882, 16.) Scitamineæ. S. deciduous per. with slender leafy stems 2 ft. high, distichous l., and oblong terminal spikes of pretty bright rose-coloured fl. [*Kæmpferia secunda*, Wall.; *B. M.* t. 6999.] India.

Monopyle racemosa. (*B. M.* t. 6233.) Gesneraceæ. S. per. softly pubescent herb. Stems erect. dark purple. L. bright green. opposite, petioled, ovate-lanceolate, acuminate, serrulate, base equal, subacute; petiole purplish with a pale green purple-centered blotch at the swollen base. Fl. numerous. in stout bracteate terminal racemes. white. obscurely spotted within, 1 in. long, ¾ in. in diam.: tube ventricose. slightly curved and gibbous on the under side; limb of 5 short broad spreading lobes, the two lower ones toothed. Colombia.

Montbretia crocosmæflora. (*F. M.* t. 472.) Iridaceæ. H. A garden hybrid between *Tritonia Pottsii* and *Crocosmia aurea*. [*Tritonia crocosmæflora*, Hort.]

Montbretia Pottsii. (*G. C.* 1877, viii. 424.) H. 3–4 ft. high. L. about 6 to a stem, linear-ensiform. glabrous, 1½–2 ft. long, ½–¾ in. broad. Panicle about 1½ ft. long, with 3–4 lateral branches, 6–9 in. long. Perianth funnel-shaped, 1 in. long. deep bright yellow. tinted outside with red: style exserted, trifid at apex. South Africa. [*Tritonia Pottsii*, Benth.; *B. M.* t. 6722.]

Moorea irrorata. (*G. C.* 1890, viii. 7; *Gfl.* 1890, 538; *B. M.* t. 7262.) Orchidaceæ. S. Allied to *Houlletia*, from which it differs in the shape and details of the lip. The scape is 1½ ft. long and bears about a dozen fl., each 2 in. in diam. and coloured reddish brown.

Moricandia sonchifolia. (*B. M.* t. 6243.) Cruciferæ. H. annual, 1–2 ft. high. leafy. glabrous. L. sessile, acutely auricled at the base; radical l. soon withering. lyrate-pinnatisect. sinuate, serrate; cauline l. obovate-oblong, subacute, sinuate, serrate. Fl. in terminal racemes, 1 in. in diam., pale violet-blue, very showy. China.

Morina betonicoides. (*B. M.* t. 6966.) Dipsacaceæ. H. herb. per. 10–18 in. high, with linear-lanceolate spinose-ciliate l., and heads of bright rose-purple fl. marked with a crimson spot at the base of the three lower lobes of the curved funnel-shaped corolla. Sikkim.

Morina coulteriana. (*B. M.* t. 6734; *R. H.* 1884, 384.) H. herb, 6–18 in. high, with narrow spine-margined l., and terminal spikes of pale yellow fl. Bracts connate into a broad cup, rigidly spinous; corolla with slender tube ½–1 in. long; calyx-lobes bifid. Western Himalaya.

Morinda citrifolia. (*G. C.* 1879, xi. 332, f. 46.) Rubiaceæ. S. shr. with fine laurel-like opposite light green l., pure white fl. like those of *Ixora*, and large creamy-white globose fr. formed by the complete union of the numerous ovaries of the fl.-head into a solid globular mass. India.

Morisia hypogæa. (*G. C.* 1890, viii. 503.) Cruciferæ. H. alpine plant with dense rosettes of shining elegantly cut l. and sessile bright yellow fl. Corsica and Sardinia.

Mormodes aromatica oleo-aurantiaca. (*G. C.* 1880, xiv. 358.) Orchidaceæ. S. Fl. large, orange-coloured, with numerous points and streaks of blackish purple. The type has fl. of a brownish purple with darker spots.

Mormodes Buccinator aurantiaca. (*Ill. H.* 1892, t. 144.) S. A var. with orange sep. and pet. and a yellow lip. Peru.

—— Var. **major.** (*G. C.* 1880, xiv. 358.) S. Fl. larger than those of the type, ochre-coloured, with numerous small cinnamon dots. Lip with a few pallid marks on the sides.

—— Var. **theiochlora.** (*G. C.* 1881, xv. 428.) S. A var. with light green sep. and pet., a sulphur-coloured lip, and a white column. Colombia.

—— Var. **stenantha.** (*G. C.* 1881, xv. 136.) S. Fl. light ochre, striped with sepia-brown, with very narrow sep. and pet. Colombia.

Mormodes Cartoni aurantiaca. (*G. C.* 1881, xv. 136.) S. Fl. orange, with sulphur-coloured lip; all the parts of the fl. being very narrow. Colombia.

Mormodes Cogniauxii. (*J. O.* 1894, 125; *L.* x. t. 444.) S. The fl. are somewhat larger than those of *M. rolfeanum* to which they have a general resemblance. Colombia.

Mormodes dayana. (*G. C.* 1885, xxiv. 552.) S. Sep. and pet. ochraceous, marked inside with red lines; lip white, with very revolute margins.

Mormodes ignea maculata. (*L.* viii. t. 364.) S. A var. with yellowish brown sep. and pet. spotted with purple-brown, and a coppery red labellum.

Mormodes lawrenceana. (*L.* vi. t. 273.) S. Allied to *M. Cartoni*, having long racemes of good-sized yellowish fl. The lip dotted with brown. Colombia.

Mormodes luxata punctata. (*G. C.* 1885, xxiv. 134.) S. A var. with whitish fl. marked with small reddish spots on the sep. and pet.

—— Var. **purpurata.** (*G. C.* 1886, xxvi. 39.) S. Fl. light mauve-purple, with dark purple lines and spots on the sep. and pet., and the side lobes of the lip much darker than the central part.

Mormodes Ocanæ. (*B. M.* t. 6496: *G. C.* 1879, xii. 582, 817, f. 133, 134.) S. Fl. dull yellow, very densely spotted with small red-brown spots. Lip 3-lobed, the lobes with strongly incurved margins. Colombia.

—— Var. **brachyloba.** (*G. C.* 1881, xv. 104.) S. A var. with short lateral lobes to the lip. Colombia.

Mormodes pardina armeniaca. (*G. C.* 1879, xii. 390.) S. var. with deep apricot fl. washed here and there with deep red.

—— Var. **aspersa.** (*G. C.* 1881, xv. 136.) S. A var. having pale sulphur-coloured fl. with numerous inconspicuous pale brown spots.

—— Var. **melanops.** (*G. C.* 1886, xxvi. 680.) S. A form with very dark brownish purple fl.

Mormodes platychila. (*G. C.* 1887, i. 178.) S. Fl. pale buff-coloured, over 1 in. in diam., in compact erect racemes. Lip marked with many dull purple stripes.

Mormodes punctata. (*G. C.* 1891, x. 696.) S. Allied to *M. Wendlandii*. Pseudobulbs 3½ in. long; l. 10 in. long; raceme erect, bearing several fl. coloured yellowish brown, spotted with chestnut.

Mormodes rolfeana. (*L.* vii. t. 289; *B. M.* t. 7438.) S. Fl. large, in a lax raceme, green, tinted with brown and marked with dark green nerves; lip brownish crimson above, yellowish green beneath. Peru.

Mormodes vernixia. (*G. C.* 1887, ii. 682.) Allied to *M. Buccinator*, with a close raceme of shining blackish purple fl. Sep. and pet. broad. Lip like that of *M. variabilis*, but without hairs. Roraima. British Guiana.

Morus alba aurea. (*M. D. G.* 1896, 2.) Urticaceæ. H. A form with golden yellow l. and branches.

Morus nigra globosa. (*M. D. G.* 1896, 2.) H. A form of perfectly hemispherical habit.

Mucuna sempervirens. (*G. and F.* 1889, 266.) Leguminosæ. G. Nearly allied to the Himalayan *M. macrocarpa*. China.

Muehlenbeckia depressa. (*B. T. C.* 1888, 249.) Polygonaceæ. H. H. A misprint for *M. adpressa*. It appears to be known in some gardens as *Philopodium rigidum*.

Mulgedium giganteum. (*W. G.* 1889, 225.) Compositæ. H. per. 6–8 ft. high, with panicles of blue-violet fl.

Musa aurantiaca. (*G. C.* 1894, xv. 102; *K. B.* 1894, 260.) Scitamineæ. S. Allied to *M. coccinea*, but with bright yellow bracts and flowers. Assam.

Musa Basjoo. (*B. M.* t. 7182; *Gfl.* 1891. 439; *W. G.* 1891, 445; *K. B.* 1894, 248.) G. [Syn. *M. japonica*, Hort.] Liukiu Islands, Japan.

Musa Fehi. (*R. H.* 1888, 70; *K. B.* 1894, 246.) S. Height 15–20 ft. The stem is green with violaceous bands, and filled with an abundant violet-coloured juice. L. very large and strongly nerved. New Caledonia.

Musa Hillii. (*G. C.* 1893, xiv. 743: *K. B.* 1894, 246; *B. M.* t. 7401.) S. An Australian species of the *Sapientum* group. It has a stout stem, large l., and an erect peduncle bearing whorls of white fl. succeeded by small ovoid fruits. Queensland.

Musa japonica. (*R. H.* 1889, 491.) G. [*M. Basjoo*, Sieb. & Zucc.]

Musa kewensis. (*G. C.* 1895, xviii. 516.) S. A garden hybrid between *M. Mannii* and *M. rosacea*. The first recorded hybrid *Musa* of garden origin.

Musa Mannii. (*B. M.* t. 7311; *K. B.* 1894, 258.) S. A dwarf species, the stems not exceeding 4 ft. in height, with elegant l. 3 ft. long by 7 in. broad, and an erect spadix bearing several conspicuous boat-shaped bracts of a rose-crimson colour; fl. in threes, yellow; fr. small, angular, and green. Assam.

Musa Martini. (*R. H. B.* 1892, 107, f. 12.; *K. B.* 1894, 249.) S. A form with reddish petioles and nerves, and the upper side of the l. glaucous green, under side clear green. Fl. bright rose. Cultivated in Teneriffe.

Musa rubra. (*B. M.* t. 7451: *K. B.* 1894, 258.) S. Allied to *M. coccinea*. Stems 7 ft. high, slender. L. 6 ft. long: spike erect: bracts boat-shaped, rose red, with yellow tips; fl. 1½ in. long, pale yellow. Fr. 3 in. long, trigonous, many-seeded. Pegu.

Musa Seemanni. (*G. C.* 1890, viii. 182, f. 28.) S. It has an erect infl. similar to *M. Uranoscopus*. It is not known to be in cultivation yet. Fiji.

Musa sumatrana. (*Ill. H.* 1880, t. 375: *K. B.* 1894, 257.) S. per. ornamental foliage plant. L. oblong-lanceolate, acuminate, glaucous green, prettily marked with transverse oblong more or less confluent spots. Sumatra.

Musa Uranoscopus. (*Bull Cat.* 1881, 19.) S. Somewhat like the common Banana, but distinguished by its erect racemes of fl. and fr. Queensland.

Muscari æstivale. (*B. M.* t. 6269.) Liliaceæ. H. L. long, linear, deeply concave, light green. Scape 6–8 in. high, erect, pale green, mottled with purple below. Fl. sessile or subsessile, oblong, with 6 rounded prominences around the very contracted mouth: segments minute, reflexed: lower fl. yellow with green ribs, the upper ones tinged with purple. Bracts minute, linear. Orient.

Muscari Heldreichii. (*Gn.* t. 1199, f. a.) H. L. 3–4, long, broadly linear, channelled, obtuse. Fl. bright blue, globose, in conical dense racemes; mouth whitish, 5-toothed. Greece.

Muscari maweanum. (*G. C.* 1889, v. 648.) H. bulb. L. spreading, linear, 6–8 in. long, ½ in. wide, slightly glaucous, and deeply channelled down the face; peduncles 3–4 in. high; racemes dense, 2 in. long, 1 in. in diam.; fl. bright light blue, oblong, slightly constricted at the throat; segments round, white. Armenia.

Muscari szovitsianum. (*B. M.* t. 6855.) H. Intermediate between *M. botryoides* and *M. racemosum*. L. 6–9 in. long, linear, channelled down the rather glaucous face. Fl. deep bright blue, with a white mouth, arranged in a dense conical raceme. Perianth obovoid, $\frac{1}{5}$–$\frac{1}{6}$ in. long, constricted at the throat. Caucasus, &c.

Muscari tenuiflorum. (*W. G.* 1889, 443.) H. bulb. Allied to *M. comosum*, with subulate channelled l., and a spike of two kinds of fl., the lower ones pendulous, pear-shaped, and olive-green; the upper ones on longer stalks, nearly cylindric, and of a deep violet-blue.

Mussænda erythrophylla. (*Bull Cat.* 1888, 8, f.; *L'Hort. Int. Cat.* 1888–9, 51.) Rubiaceæ. S. Shr. hairy in all parts. L. opposite, broadly elliptic, acute, petiolate. Fl. in terminal cymes, with large elliptic crimson bracts. Corolla 1 in. long, sulphur-yellow. Tropical Africa.

Mussænda theifera. (*R. H.* 1883, 93; *Bull Cat.* 1884, 14.) S. shr. with opposite ovate l., and a terminal cluster of pure white fl., having a Jessamine-like odour. Corolla with a slender tube and spreading limb. Cochin China.

Mutisia breviflora. (*Gfl.* t. 1163, f. 1.) Compositæ. G. scrambling shr. with slender pubescent stems, sessile elliptic-oblong truncate l. toothed on the margin, and the midrib running out into a short tendril. Fl.-heads 1 in. in diam.; ray deep orange: disk yellow. Chile.

Mutisia decurrens. (*Fl. des S.* t. 2408.) H. H. Climbing per. with alternate decurrent narrow lanceolate entire l. ending in a forked tendril, and large solitary deep orange-coloured fl.-heads 4–4½ in. in diam. Chile.

Mutisia versicolor. (*Gfl.* t. 1163, f. 2.) G. scrambling shr. with slender glabrous stems, linear subulate l. with revolute margins, and fl.-heads 1½ in. in diam., with about 12 narrow linear orange rays, banded with brown. Chile.

Mutisia viciæfolia. (*R. H.* 1887, 484; 1891, 228, t.) G. A handsome climber. L. pinnate, ending in a tendril: leaflets numerous, lanceolate, acute, glabrous. Heads showy, orange: the involucre long and cylindric. Chile.

Myosotis alpestris elegantissima. (*R. H.* 1882, 20. f. 3.) Boraginaceæ. H. A pretty dwarf free-flowering var. with white, rose and blue fl.

Myosotis cintra. (*B. T. C.* 1890, 134, f. 14; *Gfl.* 1890, 191, f. 47.) H. [*M. Welwitschii*, Boiss.]

Myosotis dissitiflora grandiflora. (*Gfl.* 1886, 119.) H. A var. having fl. double the size of those of the ordinary form, and produced in great profusion in February.

Myosotis Reichsteineri. (*W. G.* 1889, 290; *Gard.* 1889, xxxv. 420.) H. A dwarf var. of *M. cæspitosa*, about 2 in. high. [*M. cæspitosa*, Schultz, var. *Rehsteineri*, Wartm.]

Myosotis sylvatica elegantissima. (*Gfl.* t. 1033.) H. per. This is a floriferous dwarf form with large white, blue or pink fl.

Myosotis Traversi. (*G. C.* 1894, xv. 778.) H. A yellow-flowered species with the habit of *M. alpestris*. New Zealand.

Myosotis Welwitschii. (*B. T. C.* 1890, 170. *Damm. Cat.* 1890–1, f. 29.) H, annual or biennial of tufted habit, about 4 in. high, with ovate-lanceolate l., and scorpioid cymes of bright blue fl. with a yellowish white eye. Portugal.

Myriocarpa colipensis. (*G. C.* 1887, ii. 243.) Urticaceæ. S. Shr. with a stout stem, and large elliptic acute bright green l. 15–18 in. long, on stout petioles 10–12 in. long. The small fl. are disposed in pendulous slender forked spikes 1½–2 ft. long. [*M. longipes*, Liebm. var. *colipensis*.] Mexico.

Myrmecodia Beccarii. (*B. M.* t. 6883.) Rubiaceæ. S. A singular plant inhabited by ants, who make their nest in the large irregular tuberous bole which is covered with spine-bearing tubercles. From the bole arise short stout spiny stems with oblanceolate fleshy l. and small white fl. seated in depressions of the stem. Tropical Australia.

Myrosma nana. (*G. C.* 1894, xv. 652.) Scitamineæ. S. A species remarkable for its dwarf habit and very hairy l. variegated down the midrib with a longitudinal yellowish band. Fl. small, white, in dense distichous spikes. Brazil?

Mystacidium filicorne. (*G. C.* 1887, ii. 686. 123–5, f. 33.) Orchidaceæ. S. A pretty free-flowering *Angræcum*-like Orchid of tufted habit, with narrow oblong l. 2–5 in. long and about ½ in. broad, obtusely 2-lobed at apex, and with racemes of numerous white fl. 1 in. in diam. Sep., pet., and lip lanceolate, acute; spur slender, 2 in. or more long. Natal.

Nægelia achimenoides. (*Gfl.* 1885, 243.) Gesneraceæ. S. A hybrid between *Nægelia zebrina* and *Achimenes gloxiniæflora*.

Nægelia hyacinthina. (*R. H.* 1877, 29, f.) S. Garden hybrid between *N.* "*Emma Lefèvre*" and *N. fulgida concolor*.

Nama Parryi. (*Fl. and P.* 1882. 12.) Hydrophyllaceæ. H. H. per., with woody stems, 4–5 ft. high; l. lanceolate, repand-toothed; panicles branched; fl. lilac-purple. California.

Napoleona cuspidata. (*G. C.* 1886, xxv. 659, 657, f. 147 b.) Myrtaceæ. S. Differing from the better known *N. imperialis* in its much larger l., which

are 8–10 in. long and 4–5 in. broad, and in its larger fl. which are regularly 5-angled, with straight sides, and not 5-lobed ; they are cream-coloured with a crimson centre.

Napoleona Miersii. (*B. M.* t. 7199.) S. shr. hitherto cultivated under the erroneous name of *N. Whitfieldii*.

Narcissus Barri. (*G. C.* 1886, xxv. 648.) Amaryllidaceæ. H. A hybrid between *N. incomparabilis* and *N. poeticus*.

Narcissus Broussonetii. (*G. C.* 1888, iii. 169, 207 ; iv. 300 ; *B. M.* t. 7016.) G. An interesting species with twisted pale glaucous green l. 1½–2 ft. long, ½ in. broad, and an umbel of 6–9 pure white fl. ¾–1 in. in diam., very sweetly scented, remarkable for the corona being absent or very rudimentary. Morocco.

Narcissus Burbidgei. (*G. C.* 1886, xxv. 648.) H. Garden hybrid between *N. incomparabilis* and *N. poeticus*.

Narcissus cernuus × triandrus. (*G. M.* 1894. 275.) H. A hybrid between these species is here described under the name of "Snowdrop."

Narcissus cyclamineus. (*B. M.* t. 6950.) H. Bulb small, ovoid, producing 2–3 linear square-keeled l. and solitary fl. ; corona orange, tubular, as long as the oblong light yellow perianth-segments, which are abruptly reflexed, so that they and the corona are in a line. Portugal.

Narcissus cyclamineus × Horsfieldi. (*G. C.* 1895, xvii. 468.) H. A garden hybrid between the two species indicated in the name.

Narcissus cyclamineus × obvallaris. (*G. C.* 1894, xv. 332, 333, f. 39.) H. A hybrid of intermediate character between its two parents.

Narcissus Fenzii. (*Gfl.* 1891, 428, f. 84; *B. T. O.* 1891, 100.) H. A garden hybrid between *N. Pseudo-Narcissus* and *N. Tazetta*.

Narcissus Grællsii. (*B. M.* t. 6473 b.) H. L. 2–4. narrow linear. Scape 1–4 in. long, bearing a solitary ascending fl. Perianth-segments shorter than the tube, lanceolate, acute, sulphur yellow, with a broad green keel. Corona as long as the segments, campanulate, sulphur yellow ; margin crenulate. Stamens and style exserted. Spain.

Narcissus intermedius. (*Damm. Cat.* 1893, 5.) H. A garden hybrid between *N. Jonquilla* and *N. Tazetta*.

Narcissus Jonquilla Burbidgei. (*G. C.* 1885, xxiii. 756.) H. A var. with the corona cut into six segments nearly down to the base.

Narcissus juncifolio-muticus. (*G. C.* 1886, xxv. 648 ; 1889, vi. 161, f. 22.) H. A probable hybrid between *N. juncifolius* and *N. Pseudo-Narcissus muticus*.

Narcissus Leedsi. (*G. C.* 1886, xxv. 648.) H. Garden hybrid.

Narcissus Margaritæ. (*Gfl.* 1891, 491, f. 91.) H. A garden hybrid between *N. Pseudo-Narcissus* and *N. papyraceus*.

Narcissus monophyllus × calathinus. (*G. C.* 1890, vii. 388.) H. H. Resembling *N. monophyllus*.

Narcissus muticus. (*F. M.* t. 224.) H. L. linear, obtuse. Fl. with a very long (1–1½ in.) tubular corona, rich yellow ; limb of corolla paler, very spreading ; lobes about as long as the corona. Pyrenees.

Narcissus rupicola. (*B. M.* t. 6473, f. c.) H. L. 2–4, narrow-linear, glaucescent. Scape as long as the l., slender, 3–6 in. long, one-flowered. Perianth bright yellow : the segments spreading, ovate, acute, shorter than the tube. Corona shorter than segments, cup-shaped, with six rounded lobes. Stamens and style included. Spain.

Narcissus pallidulus. (*B. M.* t. 6473, f. a.) H. L. single, very narrow, channelled, glaucescent. Scape slender, 6–12 in. high, with 1–2 drooping sulphur-yellow fl. Perianth-segments lanceolate, acute, reflexed, as long as the slender tube. Corona shorter than the perianth-segments, cup-shaped, nearly or quite truncate. Stamens and style exserted. Spain.

Narcissus Pseudo-Narcissus Johnstoni. (*G. C.* 1887, i. 288. 60 ; 1890, vii. 465, f.) H. A form with pale sulphur-coloured fl., remarkable for the long and rather slender

coronal tube, which is about ¾ in. long and less spreading at the mouth than in the common Daffodil. This is the same as *N. Johnstoni*, and is a hybrid between *N. Pseudo-Narcissus* and *N. cyclamineus*. Portugal.

Narcissus scaberulus. (*G. C.* 1888, iv. 296.) H. Allied to *N. rupicola*. Bulb small. L. 2, more or less prostrate, linear, 2-angled beneath, glaucous, with rough edges and keels. Scape 2½–4 in. high, 1–2-flowered. Fl. small, yellow, with a cup-shaped corona, and 3 exserted stamens. Portugal.

Narcissus syriacus. (*W. G.* 1890, 362, f. 80.) H. A handsome species, with large white fragrant fl. in close umbels.

Narcissus triandrus × albicans. (*G. M.* 1896, xxxix. 164, f.) H. Garden hybrid.

Narcissus triandrus × poeticus ornatus. (*G. M.* 1894. 275.) H. A hybrid intermediate in character between the two parents.

Narcissus Victoriæ. (*Gfl.* 1891, 453, f. 86.) H. A garden hybrid between *N. Pseudo-Narcissus* and *N. aureus*.

Nardostachys Jatamansi. (*B. M.* t. 6564.) Valerianaceæ. H. per. herb. L. radical, spathulate, elliptic-lanceolate, acute. Scape 4–10 in. high, simple or trichotomously branched, with a pair of small opposite sessile l. above the middle. Fl. bright pink, in small dense heads. Himalaya.

Narthex Polakii. (*W. G.* 1889, 411.) Umbelliferæ. H. [*Ferula Narthex*, Boiss.]

Negundo nikoense. (*G. C.* 1881, xvi. 815.) Sapindaceæ. H. tree with short-stalked trifoliolate l. hairy on the under side as well as on the petioles, young shoots and buds. [*Acer nikoense*, Maxim.] Japan.

Neillia Torreyi. (*G. and F.* 1889, 4, f. 84.) Rosaceæ. H. per. Similar to *N. opulifolia*, but more compact in habit, and only 2–3 ft. in height. Rocky Mountains.

Nemastylis cœlestina. (*Gfl.* t. 1081.) Iridaceæ. G. or H.H. L. erect, linear, acute; fl.-stem slender, erect; fl. dark blue, 2½ in. in diam., with nearly equal segments; anthers yellow. Mexico.

Nemesia cynanchifolia. (*G. C.* 1879, xii. 136, f. 22.) Scrophulariaceæ. G. A *Linaria*-like annual 6–12 in. high, with opposite lanceolate acuminate toothed l., and terminal clusters of bright blue fl. with a yellow palate and a long curved spur. Natal.

Nemesia strumosa. (*G. C.* 1892, xii. 269, f. 48; *B. M.* t. 7272.) G. Hardy annual. 1–2 ft. high, covered with glandular hairs. L. lanceolate, toothed; fl. in corymbs, ¾–1 in. in diam., very variable in colour, being white, ochreous, pale yellow, orange, scarlet, carmine, or rosy-purple. South Africa.

Neobenthamia gracilis. (*G. C.* 1891. x. 272. f. 33; *Gfl.* 1891, 534; *B. M.* t. 7221.) Orchidaceæ. S. It has long thin bamboo-like stems, narrow l., and terminal many-flowered racemes. The fl. are nearly 1 in. across and pure white. Zanzibar.

Neodryas sacciana. (*J. O.* 1893, 73.) Orchidaceæ. G. A species with the habit of a small *Oncidium*, and small fl. coloured dull purple with a yellow lip. The genus is closely allied to *Mesospinidium*. Bolivia.

Nepenthes amabilis. (*Williams' Cat.* 1886, 26.) Nepenthaceæ. S. A garden hybrid between *N. Hookeri* and *N. rafflesiana*.

Nepenthes amesiana. (*G. C.* 1893, xiv. 756.) S. A garden hybrid between *N. rafflesiana* and *N. hookeriana*.

Nepenthes ampullaria vittata major. (*Ill. H.* 1877, t. 272.) S. Only differs from the type in having the pitchers mottled with red-brown. East Indies.

Nepenthes angustifolia. (*G. C.* 1882, xvi. 524.) S. A small species with narrow lanceolate acuminate amplexicaul decurrent l. 4 in. long, ¾ in. broad, and flask-shaped pitchers 1¾–2 in. long, green, spotted with red: lid roundish-cordate, with an entire or pinnatisect spur at the base. Borneo.

Nepenthes atrosanguinea. (*G. C.* 1882, xvii. 826. 827. f. 125; *Williams' Cat.* 27, f. 18.) S. A garden hybrid.

Nepenthes bicalcarata. (*Veitch Cat.* 1880. 23, t. 15; *G. C.* 1880, xiii. 200, f. 36.) S. Pitchers large, covered with a rusty down when young, with

broad toothed wings, and two sharp-curved spurs which stand under the lid; neck also with a blunt dorsal spur. Borneo.

Nepenthes Burkeii. (*G. C.* 1889, vi. 493, f. 69.) S. Remarkable for its cylindric wingless pitchers, narrowed in the middle, and coloured green with blotches of red. Borneo.

—— Var. **excellens.** (*J. of H.* 1890, xxi. 161, f. 21.) S. Pitchers larger and more richly coloured than in the type.

—— Var. **prolifica.** (*G. C.* 1890, viii. 184.) S. L. narrow and pitchers smaller than in the type.

Nepenthes cincta. (*G. C.* 1884. xxi. 576. f. 110.) S. Stems stout: l. approximate, oblong-lanceolate, coriaceous, glabrous, dark green; pitchers tubular, somewhat ventricose, 7–8 in. long, by 2½ in. in diam., green, flushed with red and blotched with purple. Borneo.

Nepenthes coccinea. (*G. C.* 1882, xviii. 169, f. 29; *Williams' Cat.* 1882, 27.) S. Garden hybrid.

Nepenthes compacta. (*Williams' Cat.* 1881, 17, 36.) S. Var. of compact habit, producing an abundance of pitchers. Pitcher about 5 in. long, and 8 in. in circumference, with reddish-purple markings, and sometimes shaded with violet, or splashed and marbled with creamy white; the margins and mouth of the same colour; the lid beautifully spotted.

Nepenthes Courtii. (*Veitch Cat.* 1878, 24.) S Garden hybrid between *N. Dominii* (male), itself a hybrid, and an unnamed Bornean species (female).

Nepenthes Curtisii. (*G. C.* 1887, ii. 681, 689, f. 133; *B. M.* t. 7138.) S. L. oblong, obtusely bilobed at the apex: pitchers cylindric, 6–8 in long, dull green, mottled with purple, with fringed wings, a deeply frilled mouth, and an erect ovate wavy lid, prettily reticulated with purple on a pale ground, having a compressed obtuse horn at the base, and a slender horn near the apex inside. A little below the base of the lid on the back of the pitcher is another slender horn or spur. Borneo.

Nepenthes cylindrica. (*G. C.* 1887, ii. 521, f. 103.) S. Garden hybrid.

Nepenthes dicksoniana. (*G. C.* 1888, iv. 543, 541, f. 78.) S. Garden hybrid.

Nepenthes dormanniana. (*Williams' Cat.* 1882, 28; *G. C.* 1882, xvii. 525, f. 81.) S. Garden hybrid.

Nepenthes excelsior. (*Fl. and P.* 1883, 108.) S. Garden hybrid.

Nepenthes findlayana. (*Williams' Cat.* 1886, 25, 21, f.) S. Garden hybrid.

Nepenthes formosa. (*Veitch Cat.* 1895, 8.) S. A garden hybrid between *N. Chelsoni* and *N. distillatoria*.

Nepenthes henryana. (*Williams' Cat.* 1881, 22, 36; *Ill. H.* 1882, t. 460.) S. Garden hybrid between *N. Hookeri* and *N. Sedeni*.

Nepenthes Hibberdii. (*Williams' Cat.* 1883, 27, t. 23; *Fl. and P.* 1883, 75.) S. Garden hybrid.

Nepenthes hirsuta glabrescens. (*G. C.* 1882, xvii. 393, 399, f. 59.) S. A nearly glabrous species, with reddish stems, lanceolate acute l., and elongate pitchers slightly inflated at the base, reddish with green veins, or wholly green: the wings are broad and ciliate, the mouth oblique with a greenish yellow finely-ribbed rim, and the lid cordate, emarginate, with a simple spur behind. Infl. paniculate. Borneo (?).

Nepenthes hookeriana. (*G. C.* 1881, xvi. 812, 813, f. 157.) S. Pitchers somewhat globose, red-spotted, with two broad ciliate wings in front, a broad finely ribbed mouth; lid erect, obovate, emarginate, with a long simple spur at its base, two prominent lateral nerves on its back and one central one on the inner face. Borneo.

Nepenthes intermedia. (*G. C.* 1882, xvii. 178, 179, f. 29.) S. Garden hybrid.

Nepenthes kennedyana. (*G. C.* 1882, xvii. 257, f. 36.) S. L. oblong-lanceolate, acute: pitchers narrow, flask-shaped, reddish, 5 in. long by 1½ in. in diam.; rim of the oblique mouth finely ribbed; lid suborbicular, with a simple spur at the back. North Australia.

Nepenthes lanata. (*G. C.* 1882, xvii. 178.) S. L. deep green, glabrous above, thinly covered with blackish hairs beneath, as are also the tendrils and

pitchers. Pitchers cylindric, not at all ventricose, 6 in. long, 1½ in. in diam., greenish; wings toothed and fringed; mouth finely ribbed, prolonged into a triangular neck; lid oblong or suborbicular. Borneo.

Nepenthes laurenciana. (*G. C.* 1880, xiv. 40, 41, f.; *Williams' Cat.* 1880. 16, t. 9.) S. A hybrid of *N. Phyllamphora* and *N. hookeriana*.

Nepenthes madagascariensis. (*Veitch Cat.* 1882, 19; *G. C.* 1881, xvi. 685) S. A handsome species. L. oblong, acute, 5 in. long, 1¼ in. broad, green above, reddish beneath. Pitcher crimson, thinly hairy, 4–6 in. long when fully developed, inflated at the base, narrowed gradually into a cylindric neck, with or without two fringed wings in front; mouth nearly circular, with a closely ribbed border; throat cream colour; lid transverse, oblong, spurred behind. Madagascar.

Nepenthes mastersiana. (*G. C.* 1881, xvi. 748, 749, f. 148; *Fl. and P.* 1882, 106.) S. A garden hybrid between *N. sanguinea* and *N. khasyana*.

Nepenthes mixta. (*G. C.* 1893, xiii. 46, f. 9.) S A garden hybrid between *N. northiana* and *N. Curtisii*.

—— Var. **sanguinea.** (*G. C.* 1894, xvi. 318.) S. A var. with pitchers coloured dark red-brown.

Nepenthes Morganiæ. (*Veitch Cat.* 1882, 19; *Fl. and P.* 1882, 76.) S. Garden hybrid.

Nepenthes northiana. (*G. C.* 1881, xvi. 717, f. 144, and supplement.) S. Pitchers 1 ft. or more long in adult plants, greenish red with purple spots. Mouth of pitcher very oblique, with a finely ribbed frill-like margin; lid cordate in young plants, ovate-oblong in adult ones. Sarawak, Borneo.

Nepenthes obrieniana. (*Ill. H.* 1890, 109, t. 116.) S. Pitchers long, narrow; basal part green and slightly ventricose; upper half cylindric and reddish; mouth with a green rim. Borneo.

Nepenthes outramiana. (*G. C.* 1880, xiv. 41, f. 10; *F. M.* t. 384; *Williams' Cat.* 1880, 16, t. 9.) S. Garden hybrid.

Nepenthes Paradisæ. (*Williams' Cat.* 1883, 27.) S. Garden hybrid.

Nepenthes Pervillei. (*G. C.* 1896, xx. 239. S. L. short, shining, green, oblanceolate; pitchers dull crimson, 2 in. long. Wild specimens have l. 12 in. long and pitchers 8 in. Seychelles.

Nepenthes rafflesiana insignis. (*G. C.* 1882, xviii. 425, f. 69.) S. Pitchers 9 in. long, 4 in. broad, green, heavily mottled with purplish brown, and thickly beset with small stellate hairs. Borneo.

—— Var. **nigropurpurea.** (*G. C.* 1882, xviii. 425 f. 70.) S. Pitchers 6 in. long, 2½ in. broad, of a dull purplish brown with a few paler spots and a few brownish stellate hairs. Borneo.

Nepenthes Rajah. (*Veitch Cat.* 1882, 20; *G. C.* 1881, xvi. 492, 493. f. 91.) S. Adult pitchers about 1 ft. long, and 5–6 in. broad, with a very broad mouth and an orbicular lid spurred at the back. In the young plants they are somewhat hairy and of a dull purple. Borneo.

Nepenthes ratcliffiana. (*G. C.* 1882, xvii. 178, f. 28.) S. Garden hybrid between *N. Phyllamphora* and *N. hookeriana*.

Nepenthes robusta. (*G. C.* 1880, xiv. 40, 41, f.; *Williams' Cat.* 1880, 16, t.) S. A hybrid of *N. Phyllamphora* and *N. hookeriana*, with pitchers particularly wide towards the base.

Nepenthes rubro-maculata. (*G. C.* 1882, xvii. 143, f. 24.) S. Garden hybrid.

Nepenthes rufescens. (*G. C.* 1888, iv. 669, f. 95.) S. Garden hybrid.

Nepenthes stenophylla. (*G. C.* 1890, viii. 240; 1892, xi. 401. f.; *Gfl.* 1890, 647.) S. Allied to *N. Curtisii*. L. narrow; pitchers 6–7 in. long by 1¼ in. broad, green, with numerous longitudinal dark reddish purple spots; rim narrow; lid small. Borneo.

Nepenthes Stewartii. (*Veitch Cat.* 1879, 26, 52.) S. A Garden hybrid between *N. Phyllamphora* and *N. hookeriana*.

Nepenthes superba. (*F. M.* t. 434; *Ill. H.* 1881, t. 414.) S. Garden hybrid.

Nepenthes Veitchii. (*G. C.* 1881, xvi. 780, 781, f. 152; *B. M.* t. 5080.) S. Pitchers 1 ft. long, somewhat cylindric, dilated below, with two laciniate wings in front, a very broad frill-like finely ribbed creamy olive mouth, and a comparatively small oblong lid, which is glabrous; the rest of the plant being villous. Borneo.

Nepenthes Vieillardi. (*Lind. Cat.* 1876, 7.) S. Stem robust, obtusely trigonous, glabrous, slightly hairy at the apex. L. sessile, thick, lanceolate, slightly pubescent below. Pitchers oblong, ovoid, ventricose, reaching 8 in. in length, hairy with the sides winged and denticulate; cirrhi silky, white or ferruginous. New Caledonia.

Nepenthes Williamsii. (*G. C.* 1880, xiv. 40, 41, f.; *Williams Cat.* 1880, 17, t. 10.) S. A hybrid between *N. Sedeni* and *N. hookeriana*.

Nepenthes wrigleyana. (*G. C.* 1882, xvii. 143, f. 23.) S. Garden hybrid similar to *N. ratcliffiana*.

Nepeta kokamirica. (*Gfl.* t. 1030.) Labiatæ. H. per. herb. with small opposite ovate-elliptic crenately toothed l., and dense terminal spikes of blue fl.; the lower lip of the corolla is reniform, emarginate. Turkestan.

Nepeta spicata. (*B. M.* t. 6405.) H. herb of dwarf habit, with ascending stems bearing rather distant stalked cordate-ovate acute serrate l., and ending in a spike of purple fl.; fl. purple with the lower lip of the corolla nearly white; calyx with 5 subulate teeth as long as the tube; corolla-tube twice as long as calyx, funnel-shaped, curved; lower lip with an orbicular crenulate middle lobe, and very short recurved side lobes. West Himalaya.

Nephelaphyllum cristatum. (*K. B.* 1896, 194.) Orchidaceæ. S. Allied to *N. cordifolium*; l. cordate-ovate, 2 in. long; scape 10 in. long, few-flowered; fl. ½ in. wide, green with purple lines; lip white in front. Hong Kong.

Nephrodium lucidum. (*G. C.* 1877, viii. 456.) Filices. S. fern with the habit of *N. sophoroides*. Rhizome short, creeping; basal scales few, small, brown. Stipites contiguous, 1–3 in. long, slender, green; frond oblong-lanceolate, bipinnatifid, glabrous, 12–15 in. long, 5–6 in. broad at the middle; pinnæ 12–20 pairs, sessile, linear, pinnatifid; sori apical on the veins. Madagascar.

Nephrodium pallidum cristatum. (*Williams' Cat.* 1889, 23.) S. var. with crested fronds, said to yield a delicious perfume.

Nephrodium rodigasianum. (*Ill. H.* 1882, t. 442.) S. fern with handsome spreading lanceolate pinnate fronds, 3–4 ft. long; pinnæ sessile, linear-lanceolate, pinnatifid. Samoa.

Nephrodium truncatum. (*Bull Cat.* 1877, 7.) S. fern of sub-arborescent habit, with short caudex, smooth green stipites, and large lanceolate-ovate pinnate-pinnatifid wavy pale green l. East Indies, &c.

Nephrolepis Bausei. (*Veitch Cat.* 1885, 12.) Filices. S. Fern of dense dwarf habit; fronds numerous, erect, over 1 ft. high, leafy from their base, and of a soft bright green; pinnæ of the fronds bipinnatifid. Garden origin.

Nephrolepis cordatifolia compacta. (*Veitch Cat.* 1890, 12.) S. Fern with arching fronds 15–24 in. long, furnished from the base with compactly placed oblong toothed pinnules, less than 1 in. long, deep shining green, with a darker mid-nerve. The lowest pinnules are cordate and barren.

Nephrolepis davallioides multiceps. (*G. C.* 1892, xii. 249.) S. A var. with crested pinnæ.

Nephrolepis Duffii. (*Bull Cat.* 1878, 7, t. 2; *Veitch Cat.* 1878, 24; *G. C.* 1878, ix. 622.) S. Fronds linear, pinnate, dichotomously branched at the apex, growing to 2 ft. in length: pinnules small, rounded, crenate. Duke of York's Island, near New Guinea.

Nephrolepis Pluma. (*G. C.* 1878, ix. 588, f. 108.) S. Fern with tuberous rootstock and deciduous pendulous fronds. Tubers 3 in. long, as thick as the finger. Fronds 4–5 ft. long, pendulous, linear, 4 in. broad, pinnate; pinnæ very numerous, crowded, 2 in. long, linear, with a broad cordate base overlapping the rhachis; margins crenate-dentate. Madagascar.

Nephrolepis rufescens tripinnatifida. (*Veitch Cat.* 1887, 10, f.; *G. C.* 1887, i. 476, 481, f. 90, 91.) S. Fern, with large graceful lanceolate fronds, which in the typical form are pinnate with distant lanceolate entire pinnæ,

but in the form figured, the pinnæ are deeply pinnatifid and overlapping; the fronds are clothed, especially beneath, with short reddish hairs. Tropical America.

Nephthytis liberica. (*G. C.* 1881, xv. 790.) Araceæ. S. per. of no horticultural value. Stem subscandent; l. on long petioles, sagittate, bright green. Scape terminal, overtopping the l. Spathe concave, expanded, ovate-oblong, shortly cuspidate, 2½ in. long, green. Spadix shorter than the spathe; basal third female, green; upper two-thirds male, cream-coloured. Liberia.

Nephthytis picturata. (*G. C.* 1887, i. 476; *Bull Cat.* 1887, 11. f.) S. foliage plant. Petioles 10–12 in. long. Blade of l. spreading, 6–12 in. long, 5–9 in. broad, ovate-hastate, dark green, variegated between the nerves with white. Congo.

Nerine Alleni. (*G. C.* 1895, xviii. 526.) Amaryllidaceæ. G. A garden form of *N. sarniensis*.

Nerine angustifolia. (*G. C.* 1889, vi. 195.) G. [Syn. *N. flexuosa*, Herb. var. *angustifolia*, Baker.] Natal; Orange Free State.

Nerine appendiculata. (*G. C.* 1894, xvi. 336.) G. A species distinguished from the rest of the genus by the filaments each having outside at the base a strap-shaped process with 2–4 long apical teeth. In habit and in the size and colour of the fl. it agrees with *N. angustifolia*. Natal.

Nerine atrosanguinea. (*G. C.* 1882 xviii. 808.) G. Garden hybrid between *N. sarniensis Plantii* and *N. flexuosa*.

Nerine Cami. (*G. C.* 1882, xviii. 656; *Fl. and P.* 1882, 180.) G. Garden hybrid.

Nerine elegans alba. (*J. of H.* 1893, xxvii. 349, f. 51.) G. An erect scape bearing an umbel of nearly a dozen pure white fl. Said to be an introduction from South Africa, and therefore not likely to be a form of *N. elegans*, which is a hybrid of garden origin. It comes near *N. Moorei*.

Nerine excellens. (*Fl. and P.* 1882, 52; *Bull Cat.* 1882, 16.) G. Garden hybrid between *N. flexilis* and *N. humilis*.

Nerine filifolia. (*B. M.* t. 6546.) G. with numerous filiform l., a hairy scape, and an 8–10-flowered umbel of rose-pink fl., the edges of the segments being margined with darker rose and wavy near the tips. Stamens and style red; anthers blue. Orange Free State.

Nerine flexuosa angustifolia. (*G. C.* 1885, xxiv. 779.) G. L. linear, ⅛–⅛ in. broad; pedicels pubescent. Pink fl. South Africa.

—— Var. **Sandersoni.** (*G. C.* 1885, xxiv. 779.) G. Differing from the type in its stouter peduncles and pedicels, broad l., and the less crisped perianth-segments which are more united into a cup at the base. South Africa.

Nerine Manselli. (*G. C.* 1886, xxv. 104.) G. Garden hybrid between *N. flexuosa* and *N. Fothergilli*.

Nerine Moorei. (*G. C.* 1886, xxvi. 681.) G. with slightly twisted thick blunt l., 9–12 in. long, and an umbel of 6–9 bright scarlet fl. with crisped oblanceolate segments, 1¼ in. long.

Nerine mutabilis. (*G. C.* 1893, xiii. 130.) G. A garden hybrid between *N. humilis* and *N. pulchella*.

Nerine pancratioides. (*G. C.* 1891, x. 576.) G. with long narrow l. subterete in the lower half. Scape 2 ft. high. Umbel 12–20-flowered: perianth white, 1 in. long, with small square bifid scales between each of the filaments as in *Pancratium*. Natal.

Nerine pumila. (*B. T. C.* 1890, 73.) G. A beautiful plant very similar to *N. currifolia*, with an umbel of 16–18 brilliant fl., scarlet with a golden sheen. The l. appear after the fl., and are about 10 in. long, channelled, glaucous, incurved and spreading on the ground.

Nerine rosea crispa. (*W. G.* 1890, 362, f. 81.) G. A hybrid between *N. undulata* and *N. flexuosa*.

Nerine sarniensis Plantii. (*G. C.* 1885, xxiv. 779.) G. A var. with dull crimson fl. and more distinctly clawed segments.

Nerine Stricklandii. (*G. C.* 1894, xvi. 690.) G. A garden hybrid between *N. currifolia* and *N. pudica*.

Nesopanax vitiensis. (*Gfl.* 1887, 71.) Araliaceæ. S. A small tree, with long-stalked large digitate l. having 6–10 obovate bluntly-pointed leaflets attenuated at their base into long stalks. Umbels compound, 9–12 in. in diam.; fl. green. [*Plerandra vitiensis*, Baill.] Fiji.

Neumannia arcuata. (*R. H.* 1886, 108, t.) Bromeliaceæ. S. L. petiolate, lanceolate, acute, 2½–3 ft. long, 3–4 in. broad, the petioles spiny; fl.-stem arching, as long as the l., clothed with lanceolate bracts, which are brownish red on the lower part of the stem, and bright carmine on the narrow cylindric flower-spike. Fl. 3 in. long; calyx carmine and yellow; pet. pale yellow. [*Pitcairnia arcuata*, André.] Andes of Colombia.

Neumannia nigra. (*R. H.* 1881, 390, t.) S. Stem ascending; l. petiolate, oblong-elliptic, acute, green; spike elongated, with long violet fl., subtended by large, recurving rich coral-red bracts. [*Pitcairnia.*]

Neuwiedia Griffithii. (*O. R.* 1894, 276; *B. M.* t. 7425.) Orchidaceæ. S. This is more dwarf than *N. Lindleyi*, mentioned below, being only about 1 ft. high; the fl. are small, pure white and borne in spikes 3 in. long. Malacca; Perak.

Neuwiedia Lindleyi. (*B. M.* t. 7368; *O. R.* 1894, 70.) S. A tall stout erect herb 3–4 ft. high, with the habit and l. of *Curculigo* and an erect scape bearing numerous short-stalked subcylindric golden yellow fl. 1 in. long. Malaya.

Neviusia alabamensis. (*R. H.* 1881, 198; *B. M.* t. 6906.) Rosaceæ. H. Shr. with alternate ovate-elliptic toothed deciduous l., and corymbs of apetalous fl. terminating the young shoots. Pedicels slender, 1–1½ in. long. Calyx-lobes elliptic, serrate, reflexed, green. Stamens numerous, white, giving the plant its floral effect. Southern United States.

Nicotiana affinis. (*G. C.* 1881, xvi. 141, f. 31.) Solanaceæ. A handsome G. or H. H. annual, about 2 ft. high, with ovate obtuse l. narrowed at base into a winged petiole. Fl. with a tube 3–3½ in. long, and a limb nearly 3 in. across, white inside, green outside; deliciously scented in the evening. [*N. alata*, Link & Otto.] Brazil.

Nicotiana colossea. (*R. H.* 1888, 511.) H. H. or G. annual, with a stout simple stem 7–10 ft. high. L. very large, 3 ft. long, by 20–22 in. broad, dark shining green, tinted with reddish violet when young, ovate, acute, attenuate at the base into large wavy wings on the stout petiole. [*N. tomentosa*, Ruiz & Pav.] Brazil.

—— Var. **variegata.** (*R. H.* 1893, 9.) G. A variegated form of *N. tomentosa*.

Nicotiana tomentosa. (*B. M.* t. 7252.) G. The correct name for the plant known as *N. colossea*. Brazil.

Nidularium acanthocrater. (*B. H.* 1884, 140, t. 9.) Bromeliaceæ. S. A large species, 2½–3 ft. in diam. L. in a dense rosette, spreading, obtuse, with spiny margins, dark green above, banded with grey below; the inner l. spotted with brown. Fl. in a dense head in the centre of the l., purplish or bluish. [*Karatas acanthocrater*, Antoine.] Brazil.

Nidularium ampullaceum. (*R. H.* 1880, 242.) S. A distinct and pretty species producing numerous suckers. L. few, short, green, spotted with red-brown, especially beneath. Capitulum about 12-flowered. Bracts and sep. green; corolla blue, white at the throat. The plant is remarkable for the manner in which the long sheaths of the l. are collected into a sort of ovoid pitcher. [*Karatas.*] Brazil.

Nidularium Binoti. (*B. H.* 1880, 91.) S. The l. spread nearly horizontally forming a flat rosette nearly 3 ft. in diam.; they are almost flat. spinescent, obcordate, mucronate, dark green, ornamented with transverse grey bands, and marked at the apex with a flesh-coloured spot. Capitulum many-flowered. Fl. white, opening in succession during two or three months. [*Karatas Binoti*, Antoine.] Brazil.

Nidularium Chantrieri. (*R. H.* 1895, 452, t.) S. A garden hybrid between *N. fulgens* and *N. Innocentii*.

Nidularium digeneum. (*W. G.* 1893, 121, t. 1.) S. A garden hybrid between *N. Innocentii* and *Bromelia nitens*.

Nidularium Innocentii, foliis luteo-variegatis. (*Ill. H.* 1894, 73, t. 5.) S. This differs from the type in having the l. marked with longitudinal lines and bands of yellowish white. [*Karatas Innocentii*, Antoine, var.]

Nidularium Johannis. (*R. H.* 1884, 432.) S. Of vigorous habit; l. spreading, about 1½ ft. long, obtuse and channelled down the face, very pale green, slightly marbled, reddish at the apex, the margins armed with fine distant spines. Infl. immersed in the centre of the l. Fl. small, white. [*Karatas.*] Brazil.

Nidularium makoyanum. (*Gfl.* 1887, 656.) S. In the way of *N. spectabile*, differing in the l. being green on both sides, obscurely white-banded beneath; the bracts green, narrowly linear-lanceolate; pet. free to the base, whitish, slightly violet towards the acuminate tips. [*Karatas.*] Tropical America.

Nidularium paxianum. (*Gfl.* t. 1415.) S. Nearly allied to *N. Innocentii*, but with peculiar yellow-green l.; bracts red-tipped; fl. white. Brazil.

Nidularium princeps magnificum. (*Gfl.* t. 1223.) S. Differing from the type in having the lower l. shorter and broader, and of a dark vinous-purple, the upper elongate, narrower, green with bright rosy tips, lepidote beneath. Garden var. obtained by bud-variation of the type.

Nidularium rutilans. (*B. H.* 1885, 81.) S. This is distinguished from the other known species by its vermilion-red fl. which are disposed in a contracted panicle nestling among the bract-l.; these l. are of a beautiful red, shaded with rose; the smooth l. are spotted with dark green. [*Karatas rutilans*, Baker.] Brazil.

Nidularium striatum. (*Bull Cat.* 1888, 8, f.; *L'Hort. Int. Cat.* 1888-9, 51.) S. With a rosette of spreading broad l. 8–12 in. long, green, striped with white and creamy yellow, the margins spinulose.

Niphæa Rœzli. (*Gfl.* t. 896.) Gesneraceæ. S. herb of dwarf compact habit, branched, covered with white or reddish hairs. L. stalked, 1½-2½ in. long, oval, obtuse, crenate, rugose, dark green. Fl. in the upper axils on long glandular-hairy purple pedicels; calyx with a short purple tube and 5 linear-oblong lobes; corolla small, white, with 5 ovate obtuse lobes. Tropical America.

Nolina georgiana. (*G. C.* 1881, xv. 688, 697, f. 125.) Liliaceæ. H.H. bulbous per. L. linear, 1-2 ft. long, dry, harsh, serrulate. Fl.-stem 2-3 ft. high, paniculately branched. Fl. very numerous, small, whitish.

Nothochlæna mollis. (*G. C.* 1892, xiii. 638.) Filices. G. Fronds light green, silvery-powdered beneath; habit dense, compressed.

Nothochlæna Muelleri. (*G. and F.* 1888, 316.) S. Fern with slender fronds 1 ft. long, having rounded olive-green pinnæ covered with brownish scales.

Notospartium Carmichæliæ. (*G. C.* 1883, xx. 169, f. 26; *Fl. and P.* 1883, 139; *B. M.* t. 6741.) Leguminosæ. H. H. A pretty Broom-like shr. with slender leafless branches, and short racemes of rose-purple pea-like fl. New Zealand.

Notylia bipartita. (*G. C.* 1880, xiv. 358.) Orchidaceæ. S. Fl. numerous, in the way of those of a *Dendrochilum*. Mexico.

Notylia brevis. (*K. B.* 1895, 194.) S. Allied to *N. micrantha*. L. oblong, 4 in. long; raceme short, many-flowered; fl. minute, white and yellow. South America.

Notylia Bungerothii. (*G. C.* 1887, ii. 38.) S. Pseudobulbs large, broadly oblong, rugose. L. broadly cuneate-oblong. Fl. small, yellowish-green, in long dense racemes. Tropical America.

Notylia laxa. (*G. C.* 1882, xvi. 620.) S. L. cuneate-oblong, ligulate, acute; racemes of greenish fl. lax, elongated, deflexed; the pet. with orange spots at the base. Brazil.

Nouelia insignis. (*R. H.* 1889, 229, f. 60.) Compositæ. G. shr. or small tree with lanceolate l. 3–8 in. long, tomentose beneath, and heads of white fl. Yunnan, China.

Nunnezharia tenella. (*B. M.* t. 6584.) Palmæ. S. A diminutive Palm with dark green bifid l., and slender drooping spikes of yellow fl. Berries globose, shining, dark green. [*Chamædorea tenella*, Wendl.] Mexico.

Nuttallia cerasiformis. (*R. H.* 1875, 52; *G. C.* 1883, xix. 309, f. 44; 1896, xix. 489, f.) Rosaceæ. H. tree, with smooth brown bark. L. oblong, entire, 3-4 in. long. Fl. white, in sub-terminal racemes, appearing with the l. North America.

Nymphæa alba rubra. (*B. M.* t. 6736; *R. H.* 1884, 384) Nymphæaceæ. H. Known in gardens as *N. alba rosea*, and *N. Casparyi*. Sweden.

Nymphæa albo-pygmæa. (*G. C.* 1889, vi. 138.) H. garden hybrid.

Nymphæa andreana. (*Gard.* 1896, l. 325.) H. A garden hybrid or seedling sport. L. 8 in. across, slightly spotted with brown Fl. cup-shaped, 5 in. wide, violet-red.

Nymphæa Casparyi. (*R. H.* 1879, 230.) H. [*N. alba*, Linn. var. *rubra*, Hort.]

Nymphæa Casparyi alba. (*R. H.* 1888, 300.) H. A synonym of *N. alba*.

Nymphæa flava. (*R. H.* 1884, 479; *B. M.* t. 6917.) G. or H. H. L. numerous, small, entire. spotted with brown above, red beneath. Fl. 4 in. in diam., pale yellow.

Nymphæa kewensis. (*G. C.* 1887, ii. 366.) G. Garden hybrid.

Nymphæa Laydekeri fulgens. (*Gard.* 1893, xliv. 297.) H. A seedling var., said to be of hybrid origin. Fl. 3½ in. in diam.; pet. dark crimson.

—— Var. **liliacea.** (*Gard.* 1893, xliv. 297.) H. Said to be of hybrid origin. Fl. 2½ in. in diam.; pet. rose-coloured.

—— Var. **rosea.** (*G. and F.* 1892, 280.) H.? Said to be a garden hybrid. It has small l., green above, reddish below, and rosy pink fl., twice as large as those of *N. pygmæa*.

Nymphæa marliacea. (*G. C.* 1888, iii. 564; *Gard.* 1888, xxviii. 292, t.) H. Water-lily with canary-yellow fl. [Is the same as *N. tuberosa*, Paine, var. *flavescens*, Oliv.]

—— Var. **chromatella.** (*Jard.* 1889, 43, t.) H.

Nymphæa marliacea ignea. (*Gard.* 1893, xliv. 297.) H. Said to be of hybrid origin. Fl. nearly 5 in. in diam.; pet. bright rosy crimson.

—— Var. **rubra punctata.** (*Gard.* 1893, xliv. 297.) H. Said to be of hybrid origin. Fl. 4 in. in diam.; pet. deep rose-purple and marbled.

Nymphæa mexicana. (*W. G.* 1889, 413.) H. H. Water-lily with shining yellow fl.

Nymphæa odorata rubra. (*R. H.* 1881, 406; *B. M.* t. 6708; *Fl. and P.* 1883, 139.) H. A pretty small-flowered form, with rose-tinted fl. United States.

Nymphæa omarana. (*G. and F.* 1895, 96.) S. A garden hybrid between *N. dentata* and *N. Sturtevantii*.

Nymphæa parkeriana. (*G. and F.* 1894, 164.) S. With the habit of *N. odorata* and with large pure white fragrant fl. with yellow stamens. British Guiana.

Nymphæa Robinsoni. (*Gard.* 1893, xliv. 297.) H. Said to be of hybrid origin. Fl. 4 in. in diam.; pet. broad, coloured soft terra-cotta rose, shaded with yellow.

Nymphæa sphærocarpa rosea. (*Gn.* 1889, 389.) H. Seems to be another name for *N. alba rubra*.

Nymphæa stellata eastoniensis. (*G. and F.* 1896, 474, f. 68.) S. A seedling var. with numerous broad deep blue petals.

Nymphæa Trickeri. (*G. and F.* 1893, vi. 464.) S. A garden hybrid between *N. dentata* and *N. Sturtevantii*.

Nymphæa tuberosa. (*B. M.* t. 6536.) H. This closely resembles *N. odorata*, but the rootstock produces tubers along its sides, the l. are larger and more veined, the stipules crescent-shaped, and the fl. less odoriferous. Eastern North America.

—— Var. **flavescens.** (*G. C.* 1887, ii. 366.) H. var. with a long stout rhizome producing numerous tubers, l. like those of *N. alba*, and fl. 4–6 in. in diam., of a creamy white with bright yellow stamens.

Nymphæa voalefoka. (*G. C.* 1888, iv. 236.) S. This is said to be a white var. of *N. stellata*. Madagascar?

Nymphæa zanzibarensis. (*R. H.* 1882, 317; *B. M.* t. 6843.) S. A form of *N. stellata*, but with larger fl., 7–9 in. in diam., intense blue with violet-blue anthers. Zanzibar.

—— Var. **flore rubro.** (*Gfl.* t. 1240.) S. A var. with deep rose-purple fl., but stated (*G. C.* 1888, iii. 800) not to differ from *N. stellata purpurea*.

Oberonia Myosurus. (*O. R.* 1896, 3.) Orchidaceæ. S. A small species with terete fleshy l. covered with minute pustules. Spike cylindrical; fl. small buff-coloured. Burma.

Oberonia rufilabris. (*G. C.* 1881, xv. 104.) S. An interesting little plant with thickish equitant acute l. much like those of *Oncidium iridifolium*, and nodding terminal infl. of very small fl. in dense verticils, with setaceous bracts longer than the fl. The fl. are yellow, ultimately changing to light red. Burma.

Octomeria cochlearis. (*G. C.* 1881. xv. 266.) Orchidaceæ. S. L. strong, cochleate, glaucous, purple beneath, with numerous transverse furrows. Fl. whitish ochre, bent sideways; sep. and pet. tailed; lip trifid, hairy, light sulphur, with a purple blotch on its disk. Brazil.

Octomeria saundersiana. (*G. C.* 1880, xiii. 264.) S. L. thick, terete, subulate. Fl. pale yellow, with three purple stripes on the sep. and pet. Lip ochre-coloured. Disk and calli mauve, streaked in front and abundantly dotted. Brazil.

Octomeria supraglauca. (*G. C.* 1887, ii. 716.) S. A small tufted species about 2 in. high, with elliptic fleshy l., whitish green above, dark green and obscurely tessellated with dark purple beneath, and minutely furrowed. Peduncles 2–3-flowered. Fl. ¾ in. long, pale glassy green, faintly tinted with purple outside; lip yellowish, marked with a large lurid purple blotch. Sep. and pet. lanceolate, acuminate; lip one-fourth as long, obtuse. Brazil.

Ocimum comosum. (*W. G.* 1889, 485, f. 76.) Labiatæ. H. H. annual in the way of *O. Basilicum*, with bright green l. and blackish-purple flower.

Odontoglossum acuminatissimum. (*G. C.* 1882, xvii. 256.) Orchidaceæ. G. A distinct plant with large pyriform pseudobulbs, 3-ribbed on each side, and linear ligulate acute l. Fl. stellate, nearly orange, with a few large crimson bars; lip lanceolate, acuminate, dark yellow, with a broad brown bar, and a double keel with 6–7 teeth on each side. A natural hybrid between *O. lindleyanum* and *O. luteo-purpureum*.

Odontoglossum Alexandræ Cooksonii. (*W. O. A.* 118, 127.) G. A showy form with flowers freely blotched with chocolate. [*O. crispum*, Lindl. var.] Colombia.

—— Var. **cutsemianum.** (*L.* ii. t. 70.) G. [*O. crispum*, Lindl., var. *cutsemianum*.]

—— Var. **giganteum.** (*Fl. and P.* 1882, 107.) G. A form with fl. 5½ in. across, white with a yellow tinge on the lip.

—— Var. **Outramii.** (*W. O. A.* t. 403.) G. A handsomely spotted form, with a flush of rosy purple along the middle of the sep.

—— Var. **Stevensii.** (*W. O. A.* t. 127.) G. A showy form with the flowers blotched with cinnamon-brown. [*O. crispum*, Lindl., var.] Colombia.

—— Var. **Wilsonii.** (*W. O. A.* t. 387.) G. A var. with rose-tinted sep. and pet., and a white lip with a yellow disk, all parts being blotched with chestnut-brown.

Odontoglossum andersonianum Bradshawii. (*O. R.* 1896, 106.) G. A var. with narrow sep. and pet. coloured bright yellow, spotted with red-brown. Reichenbach held *O. andersonianum* (*R.* ser. 1. t. 37) to be a secondary type of *O. lancearis*.

—— Var. **guttulatum.** (*G. C.* 1882, xviii. 102.) G. A var. having the fl. marked with small brown spots on the sep. and pet.; lip white with a yellow base and a few brown lines.

—— Var. **imperiale.** (*G. C.* 1891, ix. 330.) G. Var. with large fl.; the segments broad, with large blotches of chestnut-red on a straw-yellow ground.

Odontoglossum andersonianum Kitsoni. (*G. C.* 1896, xix. 358.) G. A var. with large broad-petaled well-formed fl. creamy white, tinged with purple and spotted with red-brown.

—— Var. **lemoinierianum.** (*G. C.* 1888, iv. 378.) G. A var. with large fl. Sep. and pet. bordered with yellow. Lip without a border, yellow at the base.

—— Var. **lobatum.** (*G. C.* 1879, xi. 74.) G. A var. with middle-sized fl., having numerous small dark cinnamon spots on the base of sep. and pet. Lip with rather spreading narrow side lobes.

—— Var. **Marshalli.** (*O. R.* 1895, 167.) G. Differs from the type in having violet-purple spots on the fl.-segments.

—— Var. **pulcherrimum.** (*G. C.* 1892, xi. 586.) G. A fine var. with long curling segments, pale yellow, with brown-red blotches.

—— Var. **pulvereum.** (*G. C.* 1895, xvii. 81.) G. A var. with yellow fl., closely set with small red spots.

—— Var. **splendens.** (*W. O. A.* t. 292; *G. C.* 1887, ii. 220.) G. [*O. crispum*, Lindl. var. *splendens.*]

—— Var. **tenue.** (*G. C.* 1878, ix. 492.) G. A var. with small-sized fl. of a milk-white colour, with a brown blotch on each sep.; lip with a fish-tailed top.

Odontoglossum angustatum stylites. (*G. C.* 1882, xvii. 588.) G. A var. with styliform processes on each side of the callus.

Odontoglossum aspersum. (*G. C.* 1879, xi. 266.) G. Something in the way of *O. maculatum*, but with smaller pseudobulbs and thinner fl. Bracts short and broad. Sep. whitish yellow, mottled with brown blotches, keeled on the back. Pet. broader, whitish yellow, with a few brown spots at the base; lip whitish, the basal callus yellow with brown lines. Natural hybrid.

—— Var. **spiloglossum.** (*G. C.* 1886, xxv. 456.) G. A var. with a lobed lip marked with brown blotches.

—— Var. **violaceum.** (*G. C.* 1881, xv. 428.) G. A var. with mauve on the column and lip.

Odontoglossum aspersum violaceum. (*G. C.* 1895, xvii. 468.) G. A var. with buff-tinted sep. and pet. spotted with red-brown and a purplish lip.

Odontoglossum aspidorhinum. (*G. C.* 1895, xviii. 356.) G. A species with long-ovoid pseudobulbs, stiff cuneate-oblong l., and fl. of a clear yellow, blotched more or less with red-brown. Colombia.

Odontoglossum baphicanthum. (*G. C.* 1876, vi. 260.) G. In the way of *O. odoratum*, but larger. Sep. and pet. aristate, yellow with purplish blotches, which finally spread over their whole surface. Lip panduate, cuspidate, serrate, with a bifurcate callus, yellow with purplish spots. A form of the natural hybrid *O. andersonianum*; according to Reichenbach (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*. Colombia.

—— Var. **immaculatum.** (*O. R.* 1893, 199.) G. A var. with primrose-yellow fl. without any spots.

Odontoglossum Bergmanni. (*L.* vi. t. 286.) G. A form of *O. crispum* which appears to be the same as var. *Stevensii*. The fl. are white with large brown blotches.

Odontoglossum bictoniense roseum. (*Veitch Man. Odont.* 13) G. This is probably a synonym of the var. *rubrum*. The sep. and pet. are brown and the lip deep rose.

—— Var. **sulphureum.** (*Veitch Man. Odont.* 13.) G. A var. with yellow sep. and pet., and a white lip.

—— Var. **speciosum.** (*Fl.* t. 1250, f. c-d.) G. A var. with dark-purple sep. and pet. transversely marked with yellow, and with a rosy-purple lip.

Odontoglossum blandum albocupreum. (*G. C.* 1893, xiii. 355.) G. A var. with primrose-coloured fl.-segments banded instead of spotted with red-brown.

—— Var. **rossianum.** (*G. C.* 1886, xxvi. 712.) G. Sep. and pet. spotted with brown; the base of the lip yellow with red spots; the blade of the lip spotted and streaked with purple, and the crests yellow.

Odontoglossum bleichræderianum. (*L.* iv. t. 177.) G. In the way of *O. crispum*, with rosy-tinted sep. and pet. spotted with purple; lip lanceolate, acute, white, with a large purple blotch in the middle. A natural hybrid.

Odontoglossum Bleui. (*O.* 1839, 63.) G. [*Miltonia Bleui*, God.-Leb.]

—— Var. **splendidissimum.** (*G. C.* 1892, xi. 698.) G. [*Miltonia Bleui*, God.-Leb., var.]

Odontoglossum boddærtianum. (*G. C.* 1888, iii. 296.) G. Allied to *O. odoratum*. Sep. and pet. lanceolate, acuminate, yellow, marked with brown. Lip white, spotted with purple on the semi oblong, upright basal lobes; front lobe with small spreading basal angles, lanceolate, acuminate, denticulate; crest composed of two parallel 2-toothed tubercles at the base, with a few purple spots around it. Venezuela.

Odontoglossum brachypterum. (*G. C.* 1882, xviii. 552.) G. Allied to *O. Kalbreyeri*. Sep. and pet. broad ligulate, blunt, light yellow, with very few brown blotches; lip pandurate, emarginate, light yellow, with a large brown blotch on the disk, and five keels, the two longest of them serrated. Natural hybrid. Colombia.

Odontoglossum Brandtii. (*Gt.* 1889, 378, 537, t. 1308; *G. C.* 1889, vi. 591.) G. Something in the way of *O. lindleyanum*, of which it is probably a variety. Sep. and pet. yellow, spotted with brown on the basal part; lip white, spotted with purple-brown; crests two, horn-like. Colombia.

Odontoglossum Brassia. (*G. C.* 1885, xxiii. 501.) G. A curious species with *Brassia*-like fl. Sep. and pet. linear-lanceolate; lip deltoid, cuspidate, with five basal keels, the two anterior projecting. Fl. light yellow, spotted with purple-brown. Natural hybrid, and according to Reichenbach (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*. Colombia.

Odontoglossum Cervantesii lilacinum. (*L.* iv. t. 172.) G. A var. with rosy lilac fl.

—— Var. **majus.** (*Ill. H.* 1878, t. 313.) G. A var. with larger and more brightly spotted fl. than the type. Mexico.

Odontoglossum Cervantesii punctatissimum. (*G. C.* 1878, ix. 527.) G. A var. with the fl. covered over with neat purplish dots.

—— Var. **roseum.** (*Veitch Man. Odont.* 16.) G. A form with pale rose-coloured fl.

Odontoglossum chætostroma. (*G. C.* 1883, xix. 562, 592.) G. Near *O. Hulli*, with reddish brown pseudobulbs and 1 l., and an erect raceme of yellow fl. blotched with brown. Sep. and pet. lanceolate, acuminate; lip pandurate, fringed. Natural hybrid.

Odontoglossum cinnamomeum. (*W. O. A.* under t. 143.) G. Something in the way of *O. odoratum*, but with broader sep. and pet. having denser markings. The lip is downy, yellow, with a large brownish crimson spot on the disc, and the margin faintly spotted with the same colour. The fl. are strongly scented. [*O. schilleria-num*, Reichb. f.]

Odontoglossum cirrhosum. (*G. C.* 1876, v. 503; *F. M.* t. 222; *Bull Cat.* 1876, 10.) G. Fl. large, milk-white, spotted with deep purplish violet. Sep. and pet. lanceolate, undulate, ending in long slender points. Lip cuneate, dilated and crisped near base, terminating in a long linear acuminate point, with two curved blunt horn-like yellow processes on the disk. Ecuador.

—— Var. **gemmatum.** (*G. C.* 1881, xv. 330.) G. A var. with groups of mauve or purple stains at the base of the sep. and pet.

—— Var. **hrubyanum.** (*G. C.* 1885, xxiii. 370.) G. A var. with large white fl., with only a blotch of orange at the base of the lip and some red lines.

—— Var. **Klabochorum.** (*G. C.* 1876, vi. 452.) A var. with much larger flowers than the type.

Odontoglossum citrosmum album. (*Veitch Man. Odont.* 19.) G. This has pure white fl. with a yellow crest to the lip.

—— Var. **devansayeanum.** (*L.* iii. t. 137.) G. A white-flowered var. dotted on the sep. and pet. with red.

—— Var. **punctatum.** (*Veitch Man. Odont.* 19.) G. Fl. pale rose-coloured, dotted with purple on the sepal and petal.

Odontoglossum citrosmum roseum. (*Veitch Man. Odont.* 19.) G. A form with a deep rose-coloured blade to the lip.

Odontoglossum clæsianum. (*L.* vi. t. 271.) G. A supposed hybrid between *O. crispum* and *O. luteo-purpureum* or *O. odoratum*. Fl. white, blotched with brownish crimson. Colombia.

Odontoglossum claviceps. (*G. C.* 1876, vi. 516.) G. In the way of *O. ramosissimum*, with cinnamon-coloured fl. bordered with yellow. The lateral sepals stand under the lip, being almost linear; petals rather broad, very acuminate; lip oblong, acute, with a many-toothed crest. [*O. angustatum*, Lindl.] Ecuador.

Odontoglossum concinnum. (*G. C.* 1896, xix. 467.) G. A supposed natural hybrid with pale yellow fl. blotched and spotted with brown.

Odontoglossum confertum. (*G. C.* 1879, xi. 298; xii. 8.) G. Pseudobulbs elongate, pyriform, 3½ in. long, bearing 2 ligulate acute l. 1 ft. long by 1½ in. broad. Infl. a dense panicle with zig-zag branches. Sep. and pet. pale cinnamon, inside dotted with ochre, light brown outside, with a green keel, deep orange at the apex surrounded by a violet-purple border partly composed of spots; lip light yellow. Ecuador.

Odontoglossum constrictum castaneum. (*G. C.* 1886, xxiv. 712; *Ill. H.* 1888, t. 66.) G. A var. with brown sep. and pet. having one or two greenish white lines at the base.

—— Var. **majus.** (*Ill. H.* 1888, 83.) G. A form with longer fl., and the base of the lip hastate. Venezuela.

—— Var. **pallens.** (*G. C.* 1886, xxvi. 648.) G. A form with sulphur-coloured sep. and pet. and a very pale yellow lip.

—— Var. **sanderianum.** (*Veitch Man. Odont.* 20.) G. [*O. sanderianum*, Reichb. f.]

Odontoglossum cookianum. (*G. C.* 1891, x. 696.) G. A supposed natural hybrid between *O. triumphans* and *O. gloriosum*. It has deep yellow sepals and petals with numerous chestnut blotches.

Odontoglossum Coradinei albidulum. (*G. C.* 1885, xxiii. 787.) G. A form of this natural hybrid between *O. crispum* and *O. lindleyanum* with yellowish-white fl., light sulphur at the base of the lip. Colombia.

—— Var. **grandiflorum.** (*L.* ii. t. 93; *G. C.* 1887, ii. 108.) G. A large flowered form.

—— Var. **hemileucum.** (*G. C.* 1883, xix. 688.) G. A var. with white sep. and pet. spotted and striped with brown, and a light yellow lip.

—— Var. **kinlesidianum.** (*G. C.* 1885, xxiii. 787.) G. A form of this natural hybrid with white sep. and pet. with a yellow border.

—— Var. **mirabile.** (*O. R.* 1894, 198.) G. A form of this natural hybrid.

Odontoglossum cordatum aureum. (*W. O. A.* t. 489.) G. Differs from the type in having the segments blotched with greenish yellow.

—— Var. **kienastianum.** (*G. C.* 1886, xxv. 456.) G. A var. remarkable for tne few broad blotches on the sep. and pet. The lip is very dark brown in front.

—— Var. **sulphureum.** (*G. C.* 1880, xiv. 8.) G. A var. with sulphur-coloured sep.; pet. and lip white, with sulphur tips and blotches.

Odontoglossum coronarium chiriquense. (*Veitch Man. Odont.* 23.) G. A var. having rather larger and paler fl. than the type. Sep. chestnut-brown; pet. yellow with some brown markings: lip yellow with a brown blotch on the disk. [*O. chiriquense*, Reichb. f.] Chiriqui, Colombia.

—— Var. **dayanum.** (*G. C.* 1876, vi. 226.) G. Sep. rich brown-purple, bordered with brown, wavy. Pet. yellow with brown marbling. Lip with 3 conical acute warts on each side of the crest. Peru.

—— Var. **miniatum.** (*Veitch Man. Odont.* 23.) G. A form with the pseudobulbs placed more closely together, and a denser infl. and smaller fl. Sep. and pet. chestnut-brown, bordered with yellow; lip yellow. [Syn. *O. miniatum*, Hort.] Ecuador.

Odontoglossum crinitum. (*G. C.* 1882, xviii. 40.) G. A very distinct species. Fl. racemose, striped and blotched; sep. and pet. lanceolate, acuminate; lip covered with filiform processes. Colombia.

—— Var. **sapphiratum.** (*G. C.* 1886, xxv. 752.) G. A var. having the white lip covered with light mauve spots.

Odontoglossum crispum amplissimum. (*G. C.* 1893, xiv. 756.) G. A var. with large broad pure white segments, and a yellow blotch on the lip.

—— Var. **andersonianum.** (*Veitch Man. Odont.* 25, 26, f.) G. [Syn. *O. andersonianum*, Reichb. f.]

—— Var. **angustatum.** (*Veitch Man. Odont.* 25.) G. A form of *O. andersonianum* with narrower and more pointed fl.-segments, and larger blotches on the petals.

—— Var. **apiatum.** (*Veitch Man. Odont.* 27; *G. C.* 1886, xxv. 568.) G. A var. stained with violet-purple on the sep., and all the segments marked with one large and two smaller brown blotches.

—— Var. **ashworthianum.** (*G. C.* 1896, xix. 196, f. 26; *L.* xi. t. 522.) G. Fl. of a large size covered with blotches of rose and rose-purple.

—— Var. **augustum.** (*L.* xi. t. 524; *O. R.* 1896, 196.) G. A form with very large vinous red blotches.

—— Var. **aureum magnificum.** (*Fl. and P.* 1883, 42.) G. A creamy-yellow var., blotched with chocolate-brown.

—— Var. **bluthianum.** (*Ill.* t. 1356.) G. A delicate form with pale mauve sep. and pet. without spots.

—— Var. **Chestertoni.** (*Veitch Man. Odont.* 26.) G. A var. with broad sep. and pet., white, with two large, and one small reddish brown blotch on the sep., and 2–5 spots on the pet. Lip reddish brown, with a broad yellowish white margin.

—— Var. **citratum.** (*L.* xi. t. 521.) G. A form with citron-yellow fl.; lip passing into white at the margin, blotched with brown-purple.

Odontoglossum crispum cutsemianum. (*R. B.* 1888, 112.) G. A large-flowered form, with broad-toothed pet., white, spotted with red. [Syn. *O. Alexandræ*, Batem. var. *cutsemianum*, Linden.]

—— Var. **Dallemagneæ.** (*L.* ix. t. 420.) G. A var. with fl. of medium size, white, with an irregular blotch of red-brown on each segment; lip tinged with yellow and spotted with brown.

—— Var. **dormanianum.** (*Fl. and P.* 1882, 181.) G. A large-flowered colour variety.

—— Var. **Edithiæ.** (*R. B.* 1888, 112.) G. A var. with yellow fl. blotched with brown, the sep. suffused with rose, and the pet. with white centres. [Syn. *O. Edithiæ*, Warner. A form of the natural hybrid, *O. andersonianum*, Reichb. f.]

—— Var. **fastuosum.** (*G. C.* 1878, ix. 690; *L.* iii. t. 115.) G. A var. with elongated sep. The odd sep. deep bluish-lilac, with a broad white border and two large brown violet blotches; lateral sep. white on the inner half, lilac-violet on the outer half, with some brownish violet blotches towards the base. Pet. white with a brownish violet line at their base; lip rather obovate, very flat for the species; keels yellow, with some brownish violet-purple spots about them on the upper half of lip.

—— Var. **ferrierense.** (*L.* viii. t. 381.) G. A var. with large fl., the segments of which bear each a large red-purple blotch on a rose-tinted ground.

—— Var. **flaveolum.** (*G. C.* 1880, xiii. 232.) G. A var. with yellow fl. with a very few red spots and lines.

—— Var. **gouvilleanum.** (*R. H.* 1888, 132, t.) G. A var. with large white fl., having large brown blotches on the on the sep. and a spot or two on the pet.

—— Var. **grande-maculatum.** (*O. R.* 1894, 211.) G. A large and beautiful light-coloured spotted form, with very broad segments.

—— Var. **hrubyanum.** (*R.* ser. 1, t. 29.) G. A large-flowered var. in which the whole of the central area of the very broad sep. and pet. is occupied by a brown blotch.

Odontoglossum crispum hyperxanthum. (*G. C.* 1887, i. 477.) A var. with fl. devoid of purple spots, having white sep. and pet. and a yellow lip, the sep. being marked with a few yellow spots.

—— Var. **jenningsianum.** (*Veitch Man. Odont.* 26.) G. [Syn. *O. jenningsianum*, Reichb. f. A form of the natural hybrid *O. andersonianum*, Reichb. f.]

—— Var. **jumelianum.** (*G.C.* 1896, xix. 467.) G. A var. with white fl. blotched with vinous purple.

—— Var. **kinlesideanum.** (*R.* ser. 1, t. 45; *G. C.* 1888, iii. 689.) G. A form with three series of crest-like teeth on the face of the pet. Sep. and pet. rosy white; pet. streaked with red over their central area. Lip white with a yellow disk, some red spots around it, and radiating lines at the base.

—— Var. **latimaculatum.** (*L.* iv. t. 145.) G. A var. with broad white sep. and pet., and a broad chocolate spot on the lip.

—— Var. **Lehmanni.** (*G.C.* 1880, xiii. 712.) G. This is a curious form with rather narrow l. Infl. branched. Fl. numerous, usually purple, with a brown tint.

—— Var. **limbatum.** (*Veitch Man. Odont.* 26.) G. [Syn. *O. limbatum*. Reichb. f. A form of the natural hybrid *O. andersonianum*, Reichb. f.]

—— Var. **lobatum.** (*Veitch Man. Odont.* 25.) G. [Syn. *O. andersonianum*, Reichb. f., var. *lobatum*, Reichb. f.]

—— Var. **lowianum.** (*G. C.* 1894, xv. 539.) G. A var. with spotted sep. and plain-edged concave pet. marked with bands of brown.

—— Var. **luteo-radiatum.** (*L.* xi. t. 492.) G. A var. having a central band of yellow in the sep., pet. and lip.

—— Var. **Mariæ.** (*Ill. H.* 1878, t. 325.) G. Fl. pure white, except two red spots at the base of the lower sep., a few red streaks on the column, and the callus tinted with yellow.

—— Var. **Meleagris.** (*L.* xi. t. 520.) G. A fine form with large pale rosy lilac sep. and pet. shading into white towards the middle; lip large, white, orange-yellow in centre, with irregular red spots.

Odontoglossum crispum mundyanum. (*R.* ser. 2, t. 5.) G. A form marked with large blotches of magenta-purple, and having the back of the sep. and pet. flushed with purple.

—— Var. **nobilius.** (*J. of H.* 1892, xxiv. 220, f. 34.) G. A large-flowered var. with broad segments, each marked with large confluent blotches of red-dish brown on a white ground.

—— Var. **ocellatum.** (*L.* ix. t. 429.) G. A var. with very small spots freely scattered over the segments.

—— Var. **owenianum.** (*G. C.* 1893, xiii. 636.) G. A var. with large fl. heavily spotted with dark yellow on a white ground.

—— Var. **plumatum.** (*W. O. A.* t. 414.) G. A var. having the sep. and pet. flushed with a soft rosy purple tint and freely spotted with cinnamon-brown.

—— Var. **pollettianum.** (*K. B.* 1888, 12.) G. A var. with the sep. and pet. tinted with purple, and margined with creamy white; they are much spotted with reddish brown, and the lip has a brown blotch on the middle. [Syn. *O. pollettianum*, Williams.]

—— Var. **Reginæ.** (*W. O. A.* t. 264.) G. A form with white fl. evenly spotted with reddish brown, the disk of the lip being yellow.

—— Var. **Rex.** (*Gard.* 1892, xli. 546.) G. Fl. very large, with broad rose-tinted segments heavily blotched with chestnut.

—— Var. **ruckerianum.** (*Veitch Man. Odont.* 27, f.) G. [Syn. *O. ruckerianum*, Reichb. f. A form of the natural hybrid *O. andersonianum*, Reichb. f.]

—— Var. **ruckerianum superbum.** (*R. H.* 1889, 60, t.) G. A form with handsome rosy-tinted fl.

—— Var. **Sanderæ.** (*G. C.* 1892, xi. 698; *J. of H.* 1892, xxiv. 441, f. 76.) G. A var. with large crisped heavily spotted fl.

—— Var. **Scottii.** (*Fl. and P.* 1883, 42.) G. Fl. creamy yellow blotched with chocolate brown.

—— Var. **splendens.** (*K. B.* 1888, 112.) G. A var. with white fl. tinged with rose, and marked on the sep. with a

large brown blotch in the centre and several smaller spots at the base; base of the pet. spotted with brown; lip with a large central brown blotch and some small spots of the same colour on each side of the base, which is yellow with some radiating dark red lines. [Syn. *O. andersonianum*, Reichb. f. var. *splendens*, Williams.]

Odontoglossum crispum Stevensii. (*Fl. and P.* 1882, 52; *W. O. A.* t. 127.) G. Fl. large, white, heavily barred with light brown; lip with a clear yellow disk.

—— Var **sulfureum.** (*O. R.* 1896, 60.) G. A var. with the fl. of an uniform sulphur-yellow colour.

—— Var. **tenue.** (*Veitch Man. Odont.* 25.) G. [Syn. *O. andersonianum*, Reichb. f. var. *tenue*, Reichb. f.]

—— Var. **Thompsoniæ.** (*G. C.* 1893, xiv. 756.) G. A var. with large full fl. pure white with blotches of rich brown-red on the pet.

—— Var. **veitchianum.** (*G. C.* 1884, xxii. 7; *Fl. and P.* 1884, 124.) G. Sep. and pet. very broad, white, with a zone of mauve and some brown blotches.

—— Var. **venustum.** (*G. C.* 1896, xix. 655.) G. Fl. large and full, blotched with crimson-purple.

—— Var. **virginale.** (*Fl. and P.* 1882, 181.) G. A large-flowered colour variety.

—— Var. **waltonense.** (*L.* ix. t. 416.) G. A var. with large fl.; segments toothed and wavy, coloured rosy mauve on a white ground, with large dark brown blotches.

—— Var. **Wilsoni.** (*Fl. and P.* 1882, 181.) G. A large-flowered colour variety.

—— Var. **Wolstenholmiæ.** (*G. C.* 1887, ii. 98.) G. A var. with large ochre-brown spots and mauve borders to the sep. and pet.; lip with a brown disk and yellow crests.

—— Var. **wrigleyanum.** (*W. O. A.* t. 493.) G. Fl. with large heavy blotches of a plum-red colour.

—— Var. **xanthoglossum.** (*G. C.* 1883, xix. 656.) G. A var. with a yellow lip, having a few lines and a large lobed blotch of brown.

Odontoglossum crispum xanthotes. (*L.* vii. t. 312.) G. A var. with white fl. spotted with yellow.

Odontoglossum cristatellum. (*G. C.* 1878, x. 716; 1882, xvii. 143; *W. O. A.* t. 66.) G. A natural hybrid with rich brown and yellow fl., having the column, wings, and borders of the keels red. Ecuador.

Odontoglossum cristatum Lehmanni. (*Gfl.* t. 1315, f. 2.) G. A var. with oblong-lanceolate acute sep., elliptic-lanceolate acute pet., and an obovate-oblong lip, obtusely rounded and with the edges turned up so as to form a short cucullate point at the apex, the crest formed of two keels with three or four tubercles on each side at their base. The colour is yellow, marked with brown. Ecuador.

Odontoglossum cuspidatum. (*G. C.* 1881, xv. 428.) G. A natural hybrid with large yellow fl. tinted with rich chestnut-brown. Sep. and pet. rather narrow, lanceolate, acuminate, spreading; lip ligulate, acuminate, wavy and denticulate, with several split crests in front of the great square mark in the centre, white. [A form of *O. Mulus*, Reichb. f.] Colombia.

—— Var. **platyglossum.** (*G. C.* 1888, iv. 91.) G. [This is *O. luteo-purpureum*, Lindl.]

—— Var. **xanthoglossum.** (*G. C.* 1881, xv. 428.) G. Lip yellow.

Odontoglossum dellense. (*G. C.* 1891, ix. 521.) G. Supposed to be a natural hybrid between *O. Pescatorei* and *O. triumphans*.

Odontoglossum deltoglossum. (*G. C.* 1881, xv. 202.) G. Sep. and pet. spreading, lanceolate, acuminate, undulate, sulphur-coloured, with brown blotches and smears. Lip deltoid with a very short margin, lobed, wavy, denticulate, sulphur-coloured, with an orange base, and with little brown stripes on each side of it and a much larger brown obcordate blotch on the disk. Form of *O. andersonianum*; according to Reichenbach (*R.* ser. 1, t. 37) a secondary type of *O. laneeans*.

—— Var. **Stevensii.** (*O. R.* 1894, 115.) G. A var. with a branched panicle of light yellow fl. spotted with red-brown, except on the pet. which are nearly unmarked.

Odontoglossum dicranophorum. (*G. C.* 1888, iii. 330.) G. Raceme lax. Fl. as large as that of *O. triumphans* but with narrower segments. Sep. linear, acute, yellow. with 2 large brown spots. Pet. broadest at the base, acuminate, yellow, with one large and some small brown spots. Lip oblong, elliptic at the base ; front lobe linear, acute, having from the base to the centre a broad depressed crest ending in two thick blades, light yellow, with a brown spot. A natural hybrid between *O. lindleyanum* and *O. triumphans*.

Odontoglossum dormannianum. (*G. C.* 1884, xxi. 11.) G. Pseudobulb elliptic, blunt, 2-edged, grooved and wrinkled. L. very narrow and short ; fl. resembling those of *O. crocidipterum*, whitish, with numerous dark spots ; base of the lip yellow, sometimes with a few red stripes ; tip of the lip with a large blotch.

Odontoglossum Edithiæ. (*Warner Orchid. Plants*, ser. 3, t. 25.) G. See *O. crispum Edithiæ*.

Odontoglossum Edwardii. (*G. C.* 1878, x. 74 ; xiii. 72 ; *B. M.* t. 6771.) G. Infl. large ; fl. purple-violet, with a yellow lip. Ecuador.

Odontoglossum elegans. (*G. C.* 1879, xi. 462.) G. Natural hybrid much like *O. cirrhosum*. Sep. and pet. pale yellow, with narrow brown blotches. Lip yellowish, with the apical part white, with 2 long serrate keels bearing 2 small horns turned away from one another. Ecuador.

Odontoglossum elegantius. (*G. C.* 1888. iii. 200.) G. Sep. and pet. lanceolate. acute. pale yellow, marked with brown. Lip pale yellow, with a long crest between the rectangular side lobes and with two diverging emarginate shanks at the base of the cuneate-oblong apiculate mid-lobe. A natural hybrid between *O. lindleyanum* and *O. Pescatorei*. Colombia.

Odontoglossum euastrum. (*G. C.* 1887, ii. 71.) G. Allied to *O. Brassia*, with white fl. marked with mauve and brown stripes and spots on the sep., and some brown spots on the lip, which is rather heart-shaped at the base and denticulate. abruptly contracted into a long lanceolate front lobe ; crests brown, the disk around them sulphur-coloured. A natural hybrid. Colombia.

Odontoglossum eugenes. (*Veitch Man. Odont.* 73.) G. A supposed natural hybrid between *O. Pescatorei* and *O. triumphans*. Colombia.

Odontoglossum excellens. (*G. C.* 1881, xvi. 426.) G. A natural hybrid between *O. triumphans* and *O. Pescatorei*. It has also been raised artificially.

—— Var. **chrysomelanum.** (*G. C.* 1888, iii. 522.) G. A var. with yellow fl. spotted all over.

—— Var. **harvengtense.** (*O. R.* 1894, 112 ; *J. O.* 1894, 2.) G. A var. with large fl. light yellow with numerous brown spots, first described as a natural hybrid of *O. crispum* and *O. Sceptrum*.

—— Var. **luteolum.** (*O. R.* 1896, 248.) G. A var. with sulphur-yellow fl. without the brown blotches of the type.

Odontoglossum facetum. (*G. C.* 1881, xv. 562.) G. Sep. and pet. lanceolate, straight, light yellow, blotched with cinnamon ; petals with numerous fine teeth. Lip nearly circular. finely fringed, convolute, undulate, with a semicircle of radiating keels, light yellow with a horseshoe-shaped brown mark in front of the keels, and some brown spots on and between them. Natural hybrid ?

Odontoglossum ferrugineum. (*G. C.* 1883, xix. 814.) G. A natural hybrid ; sep. and pet. brown, with yellow tips ; lateral sep. standing under the lip ; pet. toothed ; lip subcordate over its stalk, narrow-oblong for half the length of the blade. then dilated into a subreniform lobe, whitish-yellow, with a brown spot on the disk.

Odontoglossum glonerianum. (*L.* iv. t. 151.) G. [*O. odoratum*, Lindl. var. *glonerianum*.]

Odontoglossum godseffianum. (*G. C.* 1891, x. 728.) G. A natural hybrid between *O. triumphans* and *O. lindleyanum*. [A form of *O. dicranophorum*, Reichb. f.]

Odontoglossum gracile. (*Veitch Man. Odont.* 74.) G. Easily recognised by the peculiar blackish tinge of the pseudobulbs, l., and peduncle, which is paniculately branched, the branches bearing 2–3 reddish brown fl. about 1 in. in diam., having two whitish crests on the fleshy lip. Ecuador.

Odontoglossum grande williamsianum. (*Veitch Man. Odont.* 33.) G. [Syn. *O. williamsianum*, Reichb. f.]

Odontoglossum grusonianum. (*L.* iv. 83.) G. Stated to be a var. of *O. andersonianum*, with pale yellow fl., having the spots almost black.

Odontoglossum Hallii Lindeni. (*L.* iv. t. 184.) G. A form with richly coloured fl.

—— Var. **superbum.** (*L.* iv. 83.) G. A form with very dark fl. bordered with yellow, and having a white lip.

—— Var. **xanthoglossum.** (*G. C.* 1879, xi. 716.) G. A var. with a yellow lip instead of a white one as in the type. Ecuador.

Odontoglossum Hallii × crispum. (*G. C.* 1896. xx. 667.) G. A garden hybrid between the two species indicated by the name. [*O. crispo-Hallii.*]

Odontoglossum Hallii-xanthum. (*L.* x. t. 467.) G. A supposed natural hybrid between *O. Hallii* and *O. polyxanthum*. Equatorial Andes.

Odontoglossum harryanum. (*G. C.* 1886, xxvi. 486; 1887, ii. 168–9, f. 41. *Veitch Man. Odont.* 37, f.) G. A very distinct species with racemes of large handsome fl. Sep. rather broad, ligulate-oblong, acute, wavy, brown, with yellow bars and margin. Pet. rather narrower, wavy, with yellow recurved points, base white, with elongated mauve blotches, brown above the middle with yellow margins and apex. Lip with a narrow basal part angled on each side, yellowish with mauve borders and lines; blade broad, pandurate, abruptly contracted into an acute point, white at first, changing to yellow, striped with mauve-purple and having a yellow frimbriate crest. Colombia.

—— Var. **flavescens.** (*G. C.* 1889, vi. 38.) G. A remarkable var., the fl. being wholly yellow.

—— Var. **pavonium.** (*G. C.* 1889. v. 428.) G. A richly marked var. with a delightful perfume.

Odontoglossum harvengtense. (*L.* x. t. 478; *J. O.* 1895, v. f. 7.) G. [A form of *O. excellens*, which see.]

Odontoglossum hebraicum. (*G. C.* 1879, xi. 462.) G. A form of *O. andersonianum*, or according to Reichenbach (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*.

—— Var. **aspersum.** (*R.* ser. 1, t. 79.) G.

—— Var. **lineoligerum.** (*G. C.* 1883 xix. 44; *W. O. A.* t. 85.) G. A var. having the letter-like markings broken up into spots and lines.

Odontoglossum Hennisii. (*G. C.* 1891. x. 158; *Gfl.* 1891, 495.) G. Species resembling *O. odoratum*. Sep. and pet. yellow with brown spots; lip white and brown. Peru or Ecuador.

Odontoglossum Hinnus. (*G. C.* 1887, i. 606.) G. A natural hybrid, with narrow lanceolate wavy sep. and pet., and a narrow acuminate lip. all the parts are yellow and brown. Ecuador.

Odontoglossum histrionicum. (*G. C.* 1882, xvii. 178.) G. A handsome form in the way of *O. Mulus*. Sep. ligulate, acute, wavy, light sulphur, with brown transverse bars. Pet. broader, whitish, with light sulphur tips. Lip trifid; side lobes oblong, yellow, with a border of reddish confluent spots: middle lobe yellow with brown spots and streaks, oblong, retuse, lobed, denticulate, wavy, with four styliform bent calli on each side. A supposed natural hybrid.

Odontoglossum Horsmanii. (*G. C.* 1880, xiii. 41.) G. Fl. light sulphur, with a few cinnamon blotches on the sep. Lip broad, wedge-shaped at base, with obscure teeth at the rounded outer border. Colombia.

Odontoglossum hrubyanum. (*G. C.* 1888, iv. 234.) G. Fl. in a lax raceme. Sep. and pet. cuneate-lanceolate, brown, with the tips and the bases of the side sep. yellow. Lip pandurate, sub-acute, denticulate in front, yellowish, with a brown blotch in front of the white crest, which is 2-toothed in front, with an apiculus and a tumour on each side at the base. Peru.

Odontoglossum humeanum. (*G. C.* 1876, v. 170.) G. Probably a natural hybrid between *O. maculatum* and *O. Rossii*.

Odontoglossum hunnewellianum. (*G. C.* 1889, vi. 67; *G. and F.* 1889, 489.) G. Allied to *O. schillerianum*. The fl. are 2 in. across, yellow, with large brown blotches; lip creamy white, spotted with brown, the edges crisped and undulate. Colombia.

—— Var. **grandiflorum.** (*L.* xii. t. 545.) G. A form with larger fl. and a more brightly coloured lip than the type.

Odontoglossum imschootianum. (*G. C.* 1891, x. 758.) G. Supposed to be a natural hybrid between *O. tripudians* and *O. lindleyanum*.

Odontoglossum Insleayi imschootianum. (*L.* viii. t. 359.) G. Fl. of a yellowish hue, as in var. *aureum*.

—— Var. **leopardinum.** (*Gfl.* t. 856.) G. Only differs from the type in being rather more richly spotted with dark purple-brown.

Odontoglossum ioplocon. (*G. C.* 1884, xxi. 445.) G. Fl. panicled; sep. and pet. narrow, wavy, mauve; lip mauve with a white tip, having a projecting blunt angle on each side of the base, and a linear-triangular front lobe; calli orange. Ecuador.

Odontoglossum jenningsianum. (*G. C.* 1878, ix. 366.) G. A form of *O. andersonianum*. Reichenbach held it to be (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*.

—— Var. **limbatum.** (*G. C.* 1882, xviii. 808.) G. A var. with a sulphur margin to the sep. and pet.

—— Var. **parciguttatum.** (*G. C.* 1883, xix. 110.) G. A white-flowered var. with a few brown spots on the sep. and lips.

Odontoglossum Kegeljani. (*B. H.* 1877, 212, t. 10.) G. Epiphyte, allied to *O. triumphans*. Fl. in a lax raceme; sep. and pet. elliptic-lanceolate, acute, yellow; sepals incurved and marked with 2-3 red-brown blotches; lip oblong, cuspidate, concave, margins serrulate: base, apex, and margins white, the rest reddish brown. Ecuador.

Odontoglossum Krameri album. (*O. R.* 1893, 200.) G. A var. without any rose purple colour in the fl. Costa Rica.

Odontoglossum Krameri smithianum. (*G. C.* 1883, xix. 242.) G. A var. with fine ivory-white fl. having a sulphur-coloured, reddish-spotted callus on the lip, and an orange transverse line, resembling two crescents, in front of it.

Odontoglossum Krænzlinii. (*G. C.* 1893, xiii. 442.) G. A species similar to *O. elegans*, with fl. 2 in. across, coloured pale yellow with brown blotches; lip lanceolate, white, with a velvety brown blotch in front, and a few purple spots at the sides. Colombia.

Odontoglossum læve auratum. (*G. C.* 1885, xxiv. 166.) G. A var. with a very narrow lip, a little dilated at the apex and acute at the top.

Odontoglossum lanceans gravesianum. (*G. C.* 1893, xiii. 322.) G. A var. with creamy white sep. and pet. spotted with red-purple. A form of *O. andersonianum*.

Odontoglossum latimaculatum. (*L.* iv. t. 145.) G. [*O. crispum*, Lindl. var. *latimaculatum*, Linden.]

Odontoglossum leeanum. (*Fl. and P.* 1882, 76; *G. C.* 1882, xvii. 525.) G. In the way of *O. deltoglossum*. Sep. and pet. lanceolate, acuminate, bright yellow, with numerous brown spots. Lip long and narrow, bright yellow, with a paler disk and a few brown spots. A form of *O. andersonianum*; according to Reichenbach (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*.

Odontoglossum lepidum. (*G. C.* 1884, xx. 526.) G. Pseudobulbs round, rather flat. Panicles many-flowered, short. Sep. and pet. at first yellow, afterwards changing to white with yellow edging; sep. with 2–3 brown spots; pet. with only one; lip cuneate-hastate at base, with a long central claw, a reniform apiculate front lobe, and a brown spot in front of the keels. Colombia.

Odontoglossum leroyanum. (*Gard.* 1890, xxxvii. 550; *O.* 1891, 112, t.) G. A form of *O. Denisoniæ*, a hybrid between *O. crispum* and *O. luteo-purpureum*.

Odontoglossum ligulare. (*G. C.* 1882, xvii. 558.) G. Sep. and pet. orange-yellow, with two or three large brown blotches. Lip with an orange claw.

and a hastate-ligulate blunt yellow blade, with a large brown blotch on its disk. A natural hybrid, a form of *O. Coradinei.*

Odontoglossum limbatum violaceum. (*G. C.* 1878, ix. 725.) G. A natural hybrid, a form of *O. andersonianum.*

Odontoglossum lindleyanum Coradinei. (*Veitch Man. Odont.* 43.) G. [*O. Coradinei*, Reichb. f.]

—— Var. **ligulare.** (*Veitch Man. Odont.* 43.) G. A form of *O. Coradinei.*

—— Var. **mirandum.** (*Veitch Man. Odont.* 43.) G. [Syn. *O. mirandum*, Reichb. f.]

Odontoglossum londesboroughianum. (*G. C.* 1876, vi. 772; *W. O. A.* t. 82.) G. Plant something like *O. bictoniense*, with very rounded pseudobulbs. Fl. racemose, 1½ in. in diameter; sepals and broader petals light yellow, with many abrupt narrow bars and broad concentric markings, brown. Labellum obtusely sagittate; claw with a triangular concave callus and a tubercle on each side before it: front lobe reniform, bright yellow with a few brown blotches at the base. Column curved, wingless. Mexico.

Odontoglossum lucianianum. (*Ill. H.* 1887, t. 7; *L.* ii. t. 65; *G. C.* 1886, xxvi. 712.) G. Something in the way of *O. naevium* and *O. odoratum*, with a fine raceme of white fl. spotted on the lanceolate acuminate sep. and pet. with reddish brown, and having a semilunar blotch of the same on the basal part of the ovate acuminate lip. Venezuela.

Odontoglossum luteopurpureum amesianum. (*G. C.* 1891, ix. 344.) G. Fl. of a pale yellow-green colour.

—— Var. **amplissimum.** (*G. C.* 1882, xvii. 525.) G. A var. with broad sep. and pet. of a clear light yellow, with a few brown streaks at the base, and a few large brown blotches on the disk.

—— Var. **ashworthianum.** (*G. C.* 1896, xx. 63.) G. Fl. 5 in. across; sep. broad, reddish brown, with yellow tips; pet. broad, creamy yellow, with red-brown spots; lip fringed, yellow, with a purple crest. Colombia.

Odontoglossum luteopurpureum cobbianum. (*O. R.* 1893, 34.) G. A var. with sep. and pet. coloured almost wholly deep chestnut, the latter marked with a broad greenish yellow band.

—— Var. **crispatum.** (*G. C.* 1889, v. 232, f. 41.) G. The whole front half of the lip convolute into deep folds.

—— Var. **cuspidatum.** (*Veitch Man. Odont.* 45.) G. [A form of *O. Mulus*, Reichb. f.]

—— Var. **facetum.** (*Veitch Man. Odont.* 45.) G. [*O. facetum*, Reichb. f.]

—— Var. **Hinnus.** (*Veitch Man. Odont.* 46.) G. [*O. Hinnus*, Reichb. f.]

—— Var. **magnificum.** (*W. A. O.* t. 254.) G. A large-flowered var. with the sep. entirely chestnut-brown except the apex and base, and the pet. and lip heavily blotched with chestnut-brown. Colombia.

—— Var. **Mulus.** (*Veitch Man. Odont.* 46.) G. [*O. Mulus*, Reichb. f.]

—— Var. **vuylstekeanum.** (*Veitch Man. Odont.* 47.) G. [Syn. *O. vuylstekeanum*, Reichb. f.]

Odontoglossum lyroglossum. (*G. C.* 1882, xvii. 632, f. 97, t.) G. A natural hybrid, a form of *O. Denisoniæ.*

Odontoglossum macrospilum. (*G. C.* 1885, xxiv. 70.) G. Sep. and pet. cuneate-lanceolate, acute, marked with blotches of dark cinnamon: lip broadly triangular, cordate-apiculate or acute, denticulate, with numerous lateral keels terminating in bristles, and a central one directed forward. A natural hybrid, a form of *O. Denisoniæ.*

Odontoglossum maculatum antennatum. (*G. C.* 1881, xv. 688.) G.

—— Var. **duvivierianum.** (*G. C.* 1888, iv. 352; *L.* v. t. 218.) G. A var. with lemon-yellow sep. and pet., and a whitish yellow lip, all of which are spotted with brown.

—— Var. **erosum.** (*G. C.* 1879, xi. 266.) G. A showy var. with an erose-toothed lip. Sep. inside chestnut-brown. Lip and pet. yellow, with dark blotches.

Odontoglossum madrense. (*G. C.* 1877, viii. 102 ; *W. O. A.* t. 71.) G. In the way of *O. nebulosum*, but more slender. Fl. white, with broad greenish or reddish brown spots at base of sep. and pet. Column white, densely hairy at the base. [*O. maxillare*, Lindl. ; *B. M.* t. 6144.] Colombia.

Odontoglossum marginellum. (*G. C.* 1882, xviii. 680.) G. Much like *O. angustatum*. Fl. light ochraceous spotted with brown : lip dark reddish brown with a yellow margin and yellow-tipped calli.

Odontoglossum marriottianum. (*G. C.* 1881, xv. 168.) G. A natural hybrid with large white fl. with a purple line down the middle of the sep. outside, and numerous small scattered purple spots on the inside of pet. and sep. Lip with a yellow disk at the base. Sep. and pet. spreading, the former twisted, the latter wavy. Lip pandurate, wavy. Ecuador.

Odontoglossum masereelianum. (*G. C.* 1888, iii. 618 : *H. G.* 1888, 310.) G. [A yellow variety of *O. Sceptrum*, Reichb. f.]

Odontoglossum mirandum. (*G. C.* 1882, xvii. 143.) G. Much like *O. lindleyanum*, differing in its large plump pseudobulbs, lanceolate l., stiff one-sided raceme, and well-developed rhomboid-serrate column-wings. Colombia.

—— Var. **breve.** (*G. C.* 1884, xxii. 776.) G. A var. with unusually short fl. having conspicuous purple brown blotches on sep. and pet., and the disk of the front part of the lip tinted with sepia.

Odontoglossum Mulus holfordianum. (*G. C.* 1882, xviii. 616.) G. A fine var. with whitish fl. having dark purple-brown blotches on the sep. and pet. ; lip white, with a very light ochaceous disk, and some purple spots. Natural hybrid.

—— Var. **statterianum.** (*G. C.* 1893, xiii. 636.) G. A var. with exceptionally large and richly marked fl.

Odontoglossum murrellianum cinctum. (*Fl.* t. 1101.) G. Raceme of white fl., having the sep. and pet. bordered with lilac, lip with some lilac spots on the front lobe, the base with a large yellow callus and some red spots. A natural hybrid.

Odontoglossum nebulosum amabile. (*L.* x. t. 450.) G. A var. with small red dots scattered liberally over the segments of the fl. [*O. apterum*, Llav. & Lex.]

—— Var. **candidissimum.** (*Veitch Man. Odont.* 53.) G. Fl. without spots.

—— Var. **candidulum.** (*Ill. H.* 1884, under t. 524.) G. A var. having entirely white fl.

—— Var. **guttatum.** (*Ill. H.* 1884, t. 524.) G. Basal half of the sep. and pet. and the greater part of the lip spotted with reddish brown.

Odontoglossum odoratum baphicanthum. G. (*Veitch Man. Odont.* 55.) G. [Syn. *O. baphicanthum*, Reichb. f.]

—— Var. **glonerianum.** (*L.* iv. t. 151.) G. A large var. with numerous fl. ; the sep., pet. and lip all lanceolate acuminate, white, much spotted with purple-brown. Venezuela.

—— Var. **hebraicum.** (*Veitch Man. Odont.* 56.) G. [Syn. *O. hebraicum*, Reichb. f.]

—— Var. **hemileucum.** (*G. C.* 1883, xix. 784.) G. A var. with the disk of the pet. and nearly the whole of the lip white.

—— Var. **leeanum.** (*Veitch Man. Odont.* 56.) G. [Syn. *O. leeanum*, Reichb. f.]

Odontoglossum Oerstedii. (*G. C.* 1877, vii. 302. 811, f. 128 ; *B. M.* t. 6820.) G. Pseudobulbs roundish, two-angled, dark, clothed with brown spathes, growing in dense masses, each with one stalked oblong l. Peduncle 1–2-flowered. Fl. in the way of *O. pulchellum*, white, with the callus of the lip and the disk before it yellow, with a few red spots. The column with very small triangular blunt auricles at each side of the base of the stigmatic cavity. Costa Rica.

Odontoglossum oliganthum. (*G. C.* 1879, xi. 556.) G. Pseudobulbs fusiform, 2-angled, with two blunt ribs in the middle of each side. L. linear-ligulate, acute, 8 in. long, ½ in. wide. Peduncle with 2–3 fl. Sep. and pet. ligulate, blunt, reflexed, brown with a yellowish area, which on the base of the pet. is dotted with brown.

Lip with two basal angles, a short isthmus and broad reniform front lobe, rich yellow with a brown border to the basal part and some brown spots on the front lobe. Guatemala.

Odontoglossum orientale. (*G. C.* 1879, xi. 336.) G. In the way of *O. spathaceum* and *O. pardinum*, having an infl. 2–3 ft. long; fl. large, yellow, with dark spots on pet.. upper sep. and lip. Eastern Andes of Ecuador.

Odontoglossum ornatum. (*W. G.* 1891, 341.) G. Regular fl. creamy-white in the centre, and marked with small red spots. Colombia.

Odontoglossum ortgiesianum. (*Fl.* t. 1360.) G. A form of *O. odoratum*. The fl. are white, edged with yellow, spotted with deep red. Colombia.

Odontoglossum owenianum. (*G. C.* 1892, xi. 535; xii. 178.) G. Species or natural hybrid with white fl. tinged with yellow and blotched with brown; lip pure white. Colombia.

Odontoglossum peetersianum. (*L.* iv. 83.) G. No description.

Odontoglossum Pescatorei aurantiacum. (*G. C.* 1883, xix. 532.) G. A var. with an orange-yellow base to the lip.

—— Var. **Chaberiæ.** (*L.* ix. t. 432.) G. A var. with pure white sep. and pet., and the lip copiously blotched with purple.

—— Var. **germinyanum.** (*W. O. A.* t. 305; *G. C.* 1887, ii. 788.) G. A var. with white fl. flushed with light rosy purple on the sep., and marked with a few rose-purple spots, chiefly on the mid line of the sep. and one at the apex of the pet. The lip white, with the basal part broadly margined with purple around a yellow disk, which has some radiating purple lines on it, and a figured blotch in front: front lobe with a few purple spots.

—— Var. **hyeanum.** (*L.* iv. 83.) G. A large-flowered form.

—— Var. **leucoxanthum.** (*G. C.* 1887, i. 606, f. 114.) G. A var. with pure white fl., only marked with orange on the crests and column.

—— Var. **Lewisii.** (*O. R.* 1893, 135.) G. Medium-sized fl. white, unspotted, suffused with purple; the lip marked with a large blotch of violet-purple.

Odontoglossum Pescatorei limbosum. (*G. C.* 1880, xiii. 169.) G. A var. with the dark spots of *O. Pescatorei purpuratum*, but fewer in number, and with numerous mauve-coloured spots in addition along the whole border of the front blade of the lip. Colombia.

—— Var. **Lindeniæ.** (*L.* vii. t. 329.) G. A form with one large purple blotch on the disc of each sep. and pet.

—— Var. **lindenianum.** (*L.* iv. t. 178.) G. A form with the sep. striated with rose, the white pet. dotted with blood-red, and the lip white with yellow crests and purple side lobes.

—— Var. **lowianum.** (*G. C.* 1884, xxi. 638.) G. A var. with long sep. and pet. spotted with mauve on a lighter mauve ground.

—— Var. **melanocentrum.** (*G. C.* 1885, xxiii. 239.) G. A var. with white fl., having the column and the base of the lip blackish purple.

—— Var. **schrœderianum.** (*G. C.* 1883, xx. 588.) G. This differs from the var. *veitchianum* in having the blotches on the sep. and pet. of a more decided purple, and not reaching so near the tips.

—— Var. **stupendum.** (*G. C.* 1887, ii. 186.) G. A large-flowered var. with the disk of the upper sep., the outer halves of the lateral sep., some spots on the pet., and lines on the lip mauve-purple.

—— Var. **thomsonianum.** (*G. C.* 1889, vi. 534.) G. A richly spotted deep-coloured form.

—— Var. **veitchianum.** (*G. C.* 1882, xvii. 588; *Fl. and P.* 1882, 76; *W. O. A.* t. 68; *Gard.* 1884, xxvi. t. 452.) G. Var., with broad mauve zonal bands and blotches. two on each sep. and pet.

Odontoglossum Phalænopsis luxurians. (*Ill. H.* 1881, t. 417.) G. A free-growing floriferous var., with large white fl. The lip with two large crimson blotches on the front lobe, some crimson streaks on the side lobes, and the callus broadly bordered with yellow. [*Miltonia Phalænopsis*, Nichols. var.] Colombia.

—— Var. **solare.** (*G. C.* 1879, xi. 494.) G. A var. with fl. larger than in type.

and a very broad lip with radiating purple points, the basal part nearly circular, yellow, with stripes. [*Miltonia Phalænopsis*, Nichols. var.]

Odontoglossum picturatum. (*W. G.* 1891, 341.) G. The fl. are similar to those of the section to which *O. gloriosum* belongs: they are of a fine yellow speckled with brown.

Odontoglossum platychilum. (*G. C.* 1892, xi. 587, f. 84; xii. 35.) G. A species with ovate monophyllous pseudobulbs, semi-erect l., and a short scape bearing one or two fl. which are 2 in. across, creamy white: lip large, coloured soft pink, with spots of purple. Central America?

Odontoglossum pollettianum. (*W. O. A.* t. 280.) G. A natural hybrid, a form of *O. undersonianum*.

Odontoglossum polyxanthum. (*F. M.* t. 453.) G. [*O. Kegeljani*, E. Morr.]

—— Var. **grandiflorum.** (*W. O. A.* t. 258.) G. A large-flowered variety.

Odontoglossum ramosissimum cœleste. (*Ill. H.* 1893, t. 170.) G. This var. differs from the type in the fl. being tinted with mauve instead of being spotted with that colour on a white ground. Colombia.

—— Var. **liliiflorum.** (*Veitch Man. Odont.* 63.) G. A robust var. with larger fl. of a pale rose-purple, marked with some white ocellated spots on the basal part of the sep. and pet., which are less wavy than in the type.

—— Var. **viride.** (*G. C.* 1880, xiii. 298.) G. A colour variety.

—— Var. **xanthinum.** (*G. C.* 1880, xiii. 298.) G. A colour variety.

Odontoglossum rhynchanthum. (*G. C.* 1887, i. 380.) G. Described as possibly a natural hybrid between *O. purum* and *O. lindleyanum*. Raceme lax; sep. and pet. ligulate, acute, yellow, with a brown line and a few brown spots at base of pet.: lip with a narrow acuminate front lobe, keels 2 or 4, no bristles.

Odontoglossum rœbelinianum. (*G. C.* 1893, xiii. 518.) G. A supposed natural hybrid.

Odontoglossum Rossii (*Ill. H.* 1880, t. 371.) G. In this plate five differently coloured vars. are figured. Mexico.

—— Var. **albens.** (*W. O. A.* t. 434.) G. A form spotted with yellow, instead of brown.

—— Var. **amesianum.** (*W. O. A.* t. 343.) G. A var. with greenish white sep., heavily spotted and barred with brown: pet. white, with a large brown area at the base: lip white with a yellow crest.

—— Var. **aspersum.** (*Veitch Man. Odont.* 65.) G. [Syn. *O. aspersum*, Reichb. f.]

—— Var. **cœrulescens.** (*Veitch Man. Odont.* 65.) G. [Syn. *O. cœrulescens*, A. Rich.]

—— Var. **Ehrenbergii.** (*Veitch Man. Odont.* 65.) G. [Syn. *O. dawsonianum*, Reichb. f. and *O. Ehrenbergii*, Link, Klotzsch & Otto.]

—— Var. **humeanum.** (*Veitch Man. Odont.* 65.) G. [Syn. *O. humeanum*, Reichb. f.]

—— Var. **immaculatum.** (*O. R.* 1894, 132: 1895, 113, f. 5.) G. A var. in which every trace of spotting has vanished from the fl., leaving the pet. and lip white and the sep. pale pink.

—— Var. **majus.** (*R. H.* 1886. 492, t.) G.

—— Var. **mommianum.** (*L.* iv. t. 179.) G. A var. with the sep. heavily blotched with blood-red, and the pet. marked along the middle with a series of blotches of the same colour; the lip is veined with rose.

—— Var. **musaicum.** (*G. C.* 1880, xiii. 200.) G. A var. with violet pet., the lower halves covered with a yellow and green blotch: the lobes chestnut-brown, streaked and dotted. Sep. yellowish, lobed, with green margins, the spots and streaks chestnut-brown.

—— Var. **pallens.** (*G. C.* 1880, xiii. 200.) G. A var. with very pale ochre-coloured fl. The callus of the lip has a very few light brown spots inside.

Odontoglossum Rossii Pauwelsiæ. (*L.* xii. t. 534.) G. Sep. and lateral pet. almost entirely light brown.

—— Var. **rubescens.** (*G. C.* 1881, xv. 202.) G. A var. with large light rose-coloured fl. richly marbled with dark purple turning to chesnut-brown.

—— Var. **smeeanum.** (*G. C.* 1887, i. 799.) G. A var. with brown sep. marked with a few whitish dots, white pet. with a brown disk and base, and a white lip with a yellow crest.

—— Var. **virescens.** (*Veitch Man. Odont.* 65.) G. A var. with white fl. spotted with green.

—— Var. **warnerianum.** (*Veitch Man. Odont.* 65.) G. [Syn. *O. warnerianum*, Reichb. f.]

Odontoglossum rubiginosum. (*L.* xi. t. 517.) G. A natural hybrid near *O. wilckeanum*. Fl. light yellow with large chocolate-brown blotches.

Odontoglossum ruckerianum splendens. (*G. C.* 1883, xx. 8.) G. This is merely a large-flowered form of *O. andersonianum* with larger purple-mauve blotches. Reichenbach called it (*R.* ser. 1, t. 37) a secondary type of *O. lanceans*.

Odontoglossum sanderianum. (*G. C.* 1881, xvi. 524, xvii. 492; *R.* ser. i. t. 94.) G. A large-flowered var. of *O. constrictum*, Lindl.

Odontoglossum Sceptrum. (*G. C.* 1882, xvii. 525.) G. [*O. luteopurpureum*, Lindl. var. *Sceptrum*, Reichb. f.; *Ill. H.* 1871, t. 73.]

Odontoglossum schillerianum. (*G. C.* 1884, xxi. 577; *L.* ii. t. 82.) G. A species with cuneate-oblong acute sep. and pet., yellow, blotched with brown, sometimes nearly all brown. Lip with small upright basal lobes, and an oblong acute wavy velvety front lobe, yellow, with a purple blotch and 2 blunt calli on the disk. Venezuela.

Odontoglossum schlesingerianum. (*L.* v. t. 240.) G. A form of *O. andersonianum*.

Odontoglossum schlieperianum flavidum. (*G. C.* 1883, xx. 135.) G. A fine var. with sulphur-coloured fl., with a few light brown bars at the base of the sep. and pet., and some orange on the base of the lip and callus.

Odontoglossum schrœderianum. (*G. C.* 1882, xvii. 700.) G. A natural hybrid believed to be a form of *O. Denisoniæ*. Colombia.

Odontoglossum schrœderianum. (*G. C.* 1887, ii. 364; *R.* ser. 1, t. 96.) G. The plant here described is *Miltonia schræderiana*, O'Brien, and not at all the same as the last named.

Odontoglossum Seringa. (*W. G.* 1891, 341.) G. A form with very round fl. somewhat smaller than that of *O. Alexandræ*, the centre of the fl. is white, the sep. and pet. are bordered with yellow, and the entire fl. is spotted with irregular patches of brown-red. Seringa, Colombia.

Odontoglossum spectabile. (*G. C.* 1896, xix. 467; *L.* xi. t. 523.) G. A supposed natural hybrid resembling *O. excellens*; fl. yellow, spotted with chestnut-brown.

Odontoglossum Staurastrum. (*G. C.* 1887, i. 313.) Very similar to *O. lindleyanum*, but sep. and pet. broader, light yellowish green, blotched with brown. Lip white, with dark brown on the front lobe, some mauve stripes between the keels, and some spots on the sides of the stalk. A natural hybrid between *O. lindleyanum* and *O. tripudians*. Colombia.

Odontoglossum stauroides gravesianum. (*G. C.* 1887, ii. 154.) G. A form with ochre-sulphur sep. and pet. marked with a few spots and some lines and dots of purple-brown at the base, lip white, with the centre and some lines and spots at the base purple-brown; crests yellow. A natural hybrid between *O. lindleyanum* and *O. Pescatorei*.

Odontoglossum stellimicans. (*G. C.* 1884, xxii, 680.) G. A natural hybrid, a form of *O. excellens*.

Odontoglossum tentaculatum. (*G. C.* 1883, xix. 814.) G. A natural hybrid, a form of *O. Mulus*.

Odontoglossum thompsonianum. (*L.* ix. t. 388.) G. A form of *O. Sceptrum* with broad segments, the blotches large and deep chocolate in colour, the lip being white with a blot of orange yellow.

Odontoglossum tripudians cinctum. (*G. C.* 1883, xix. 210.) G. A var. with yellow sep. and pet., blotched with

maroon; lip very broad, white, with a large brown blotch covering nearly the whole of the front part, and smaller blotches beside it.

Odontoglossum tripudians harryanum. (*G. C.* 1883, xix. 210.) G. A var. with the sep. and pet. almost black inside, tipped with light yellow; lip light yellow, mauve at the base.

—— Var. **leucoglossum.** (*Veitch Man. Odont.* 67.) G. A var. with the ground colour of the lip white.

—— Var. **xanthoglossum.** (*G. C.* 1881, xv. 104.) G. A var. with a yellow lip, mauve blotches, and only the crests pure white.

Odontoglossum triumphans aureum. (*W. O. A.* t. 460.) G. A distinct var. with yellow fl., which are blotched with orange-yellow instead of brown. Colombia.

—— Var. **volubile.** (*R. H.* 1888, 179.) G. This differs from the type in having narrower and longer l., a twining fl.-stem 4½ ft. or more long, with smaller distant fl. having narrower and more acuminate segments of a paler colour. Colombia.

Odontoglossum troyanofskyanum. (*L.* xii. t. 540.) G. A supposed natural hybrid between *O. Pescatorei* and *O. triumphans*.

Odontoglossum Uroskinneri album. (*G. C.* 1893, xiv. 470; *O. R.* 1893, 334.) G. A var. with a pure white lip.

Odontoglossum vexativum. (*G. C.* 1876, vi. 808.) G. A natural hybrid between *O. apterum* and *O. maculatum*. Mexico.

Odontoglossum vexillarium album. (*W. O. A.* t. 227.) G. A var. with white fl. marked at the base of the lip with light yellow. [*Miltonia vexillaria*, Benth.] Colombia.

—— Var. **album.** (*W. O. A.* under t. 204.) G. A beautiful white-flowered variety.

—— Var. **cobbianum.** (*Fl. and P.* 1882, 107.) G. A var. with a white lip.

—— Var. **fastuosum.** (*L.* iv. 83.) G. A var. with fl. having rosy pet. and a white lip.

Odontoglossum vexillarium hillianum. (*G. C.* 1880, xiv. 296.) G. A var. with rose-coloured fl. Base of lip yellow, with three dark purple lines. Lateral sep. with two such lines at their base. Lip spotted with purple.

—— Var. **insigne.** (*Bull Cat.* 1885, 15, f.) G. A var. with two parallel crimson lines at the base of the lateral sep.: lip purplish red, with a whitish basal area, crimson lines, and a band of bright yellow across the base.

—— Var. **kienastianum.** (*G. C.* 1885, xxiii. 818.) G. Sep. and pet. with a rose-coloured disc and broad white margins. Lip light yellow at the very base, with three central purple lines, and fine rose-coloured radiating lines all over it except on the pure white margin.

—— Var. **Lehmanni.** (*G. C.* 1880, xiii. 586.) G. A var. with light rose fl. The lateral sep. bear each three dark stripes. The white area around the yellow base of the lip is striped.

—— Var. **Leopoldi.** (*Gfl.* 1889, 65.) G. Similar to var. *superbum*, but with a differently shaped lip streaked with purple at the base.

—— Var. **leucoglossum.** (*G. C.* 1880, xiv. 296.) G. A var. with a white lip, and pallid sep. and pet.

—— Var. **measuresianum.** (*W. O. A.* under t. 204.) G. A white-flowered var. rather smaller and whiter than var. *album*.

—— Var. **purpureum.** (*L.* i. t. 13.) G. A form with rose-purple fl., the base of the lip being white with the usual red lines.

—— Var. **rubellum.** (*Fl. and P.* 1882. 26; *Bull Cat.* 1882, 17. t. 9.) G. A distinct autumn-flowering var. with rounder blunter pseudobulbs, broader l., and bright deep rose fl., the lip having a lemon-yellow base marked with three crimson lines.

—— Var. **rubrum.** (*F. M.* t. 461.) G. A large-flowered var. with rather deep rosy-purple fl.

—— Var. **superbum.** (*G. C.* 1881, xvi. 364.) G. A form with a very dark purple lip, having a radiating blackish zone before its base bordered with white. Pet. purple: the sep. lighter, the lateral ones with a basal line.

Odontoglossum vexillarium wiotianum. (*G. C.* 1882, xvii. 826.) G. A var. with white fl. having the base of the lip light yellow, with three short reddish purple lines in front, two purple lines at the base of the sep., and a purple dot at the base of the pet.

Odontoglossum Victor. (*G. C.* 1883, xix. 532.) G. A natural hybrid, a form of *O. marriottianum*.

Odontoglossum viminale. (*G. C.* 1885, xxiii. 108.) G. Allied to *O. anthoxanthum*. Peduncle 1 ft. long, bearing few-flowered straight racemes. Sep. and pet. brown, with whitish sulphur borders, and small linear spots around the margin. Lip light sulphur at the base, deep yellow in front. L. linear, acute, 1 ft. or more long. Colombia.

Odontoglossum vuylstekeanum. (*G. C.* 1884, xxii. 7; *W. O. A.* t. 334.) G. A var. of *O. luteo-purpureum* with deep yellow fl. blotched with orange.

—— Var. **maculatum.** (*G. C.* 1884, xxii. 584.) G. A natural hybrid. [Syn. *O. excellens*, Reichb. f. var. *maculatum*, Reichb. f.; *G. C.* 1888, iii. 522.]

Odontoglossum warocqueanum. (*L.* iv. t. 180.) G. A natural hybrid, a form of *O. andersonianum*.

Odontoglossum wattianum. (*G. C.* 1890, vii. 354; *R.* ser. 2, t. 9; *O.* 1890, 162; *Gard.* 1890, t. 751.) G. Supposed to be a natural hybrid between *O. harryanum* and *O. lindleyanum*.

Odontoglossum wendlandianum. (*G. C.* 1889, vi. 7; *G. and F.* 1889, 490.) G. Supposed to be a natural hybrid between *O. crispum Lehmanni* and *O. cirrhosum*. It has the habit and foliage of *O. crispum* and fl. like those of *O. cirrhosum*, but coloured yellow with brown spots.

Odontoglossum wilckeanum. (*G. C.* 1880, xiii. 298; *Warner Orchid. Plants*, ser. 3, t. 23.) G. epiphyte. A free-flowering plant, with light yellow triangular sep. and pet. elegantly blotched. Lip light yellow, with brown blotches. [A natural hybrid between *O. crispum* and *O. luteo-purpureum*; a form of *O. Denisoniæ*.] Colombia.

—— Var. **albens.** (*L.* i. t. 35.) G. Fl. white, blotched and spotted with red-brown, and having a yellow area at the base of the lip. Sep. lanceolate acute; pet. broadly ovate, very acute, toothed on the margins; lip pandurate, with crisped margins.

Odontoglossum wilckeanum atro-purpureum. (*W. G.* 1891, 341.) G. A var. with an edging of yellow to the red sep. and pet.

—— Var. **Dobbelæræ.** (*O. R.* 1895, 16.) G. Fl. clear canary-yellow with a few cinnamon spots; segments broader than in the type.

—— Var. **elegans.** (*O. R.* 1893, 135.) G. A var. with yellow sep. blotched with brown, primrose-coloured pet. and lip with a few small chestnut spots.

—— Var. **elongatum.** (*J. O.* 1896, 40.) G. A var. of this natural hybrid with larger and more brightly-coloured fl. than the type.

—— Var. **nobilius.** (*G. C.* 1892, xi. 700.) G. A var. with paler coloured fl. than the type.

—— Var. **olivare.** (*J. O.* 1896, 40.) G. Large olive-greenish fl.

—— Var. **pallens.** (*W. O. A.* t. 201.) G. A var. with fl. of a whitish ground colour, blotched with brown.

—— Var. **pallidum.** (*G. C.* 1882, xvii. 217.) G. A var. with whitish sulphur-coloured fl., having one large brown spot on each sep. and a few on the lip.

—— Var. **rothschildianum.** (*R.* ser. 2, t. 22; *Gfl.* 1891, 495.) G. A form with large yellow fl. blotched with dark red-brown.

—— Var. **rufum.** (*L.* xi. t. 519.) G. A form of this natural hybrid with red-brown blotches.

—— Var. **sulphureum.** (*G. C.* 1884, xxi. 306.) G. A var. with sulphur-coloured fl. having a few red blotches and lines on the lip, and 1 or 2 on the lateral sep.

—— Var. **varians.** (*G. C.* 1881, xv. 330.) G. A var. with a yellowish tinge to the ground colour when first open, then becoming white, and finally changing to light sulphur.

Odontoglossum williamsianum. (*G. C.* 1881, xvi. 134.) G. A var. of *O. grande*, but with shorter, broader and more obtuse pet. Column with uncinate wings.

Odontoglossum Youngi. (*Gard.* 1890, xxxvii. 84; *W. O. A.* t. 406.) G. A natural hybrid, a form of *O. humeanum*.

Œnothera albicaulis. (*Gn.* t. 1041; *Fl. and P.* 1882, 52.) Onagraceæ. H. per. An Evening Primrose with creeping rootstock, throwing up branching stems 12–15 in. high, covered with linear lanceolate l., and large flagrant fl. which change from white to pink. North America.

Œnothera cardiophylla. (*Fl. and P.* 1883, 27.) H. per., with stems 1 ft. high, cordate toothed l., and funnel-shaped yellow fl. in loose terminal racemes; tube about 2 in. long; limb 1 in. across. California.

Olearia insignis. (*B. M.* t. 7034.) Compositæ. G. A low flat-topped robust bush: stems densely clothed with a white felt; l. leathery, oblong. 4–6 in. long. Peduncles one-flowered; heads an inch across, white. New Zealand.

Olearia macrodonta. (*G. C.* 1886, xxvi. 304, 305, f. 62; *B. M.* t. 7065.) H. H. A free-flowering shr. with elliptic-oblong undulate coarsely toothed l. somewhat Holly-like in appearance, and large hemispherical corymbs of small daisy-like white fl. New Zealand.

Olearia nitida. (*G. C.* 1886, xxvi. 44, 45, f. 10.) H. H. A free-flowering shr. of neat and compact habit. L. elliptic, acute, with 3–4 teeth on each side, silvery tomentose beneath. Fl.-heads radiate, in compact corymbs, white. New Zealand.

Olearia ramulosa. (*Gn.* t. 1073, f. a–b.) G. shr. with small linear spreading l., and numerous solitary axillary heads of small white fl. Australia.

Oleobachia palustris. (*Williams' Cat.* 1880, 17, t. 11.) S. This is a corruption of *Delabechia rupestris*, the Bottle Tree of Australia. In its young state it forms a useful decorative plant. The l. are digitate, with 5–7 linear leaflets, dark green, with a pale midrib. [*Sterculia rupestris*, Benth.]

Olyra concinna. (*B. M.* t. 7469.) Gramineæ. S. A dwarf densely-tufted perennial grass with sessile almost imbricating distichous l. 1 in. long. Costa Rica.

Oncidium aurarium. (*G. C.* 1884, xxii. 394.) Orchidaceæ. G. Allied to *O. linguiforme*, with compressed pear-shaped ribbed pseudobulbs nearly a span high, bearing two ligulate acute l. and a panicle 4–5 ft. high, whose numerous zigzag twigs bear fine yellow fl. spotted with brown. Side lobes of lip rectangular; middle lobe triangular, light yellow; disk reddish brown at the base, over which are five light sulphur keels ending in bristles. Bolivia.

Oncidium Braunii. (*Gn.* 1886, 621, t. 1235, f. a–c; *R. H.* 1887, 144.) G. Pseudobulbs compressed, ovoid. L. solitary, ovate-oblong, sub-acute. Panicle narrow, raceme-like, with very short 2–3-flowered branches. Fl. small, yellow, marked with brown on the sep. pet. and basal half of the lip. Sep. oblong, reflexed, the lateral ones connate at base. Pet. ovate-oblong. Lip pandurate, bilobed, with a many-tubercled crest, pubescent at the base.

Oncidium brevilabrum. (*K. B.* 1894, 158.) G. With ovoid pseudobulbs 2 in. long, linear l. 12 in. long, and many-flowered panicles of bright yellow fl. barred with brown and ¾ in. in diameter.

Oncidium brienianum. (*G. C.* 1881, xv. 40.) G. Pseudobulbs short, small, compact: raceme nodding, with very short fl.-stalks. The very small front blade of the lip is a distinctive peculiarity. The fl. are bright sulphur-yellow, with distinct cinnamon bars. Paraguay.

—— Var. **rufida.** (*G. C.* 1881, xv. 40.) G. Nearly covered with cinnamon-colour.

Oncidium brunleesianum. (*G. C.* 1883, xix. 340; *W. O. A.* t. 206.) G. A pretty species, having greenish yellow sep. and pet., with a brown hue towards their tips, and some stripes of brown on the pet. at base and apex, the lateral sep. are connate and bidentate. Lip broad, trifid; side lobes erect, yellow; front lobe purple-brown; callus of two straight parallel keels, with a few small tubercles between them and two before them, yellow or white with red bars. Brazil.

Oncidium caloglossum. (*G. C.* 1885, xxiv. 165.) G. Allied to *O. marshallianum*, and like it in pseudobulb and leaf. Fl. yellow, marked with brown; calli reddish, with numerous red spots all round. Brazil.

Oncidium chrysops. (*G. C.* 1888, iii. 105; *O.* 1888, 194.) G. Allied to *O. bicallosum*, with short reddish l., and a reddish racemose peduncle. Sep. and pet. light brown, the pet. broader and wavy. Lip yellow; basal lobes small; front lobe large, reniform, emarginate, with two large tubercles at the base, 3 very small thread-like tubercles in the middle, and 3 terete ones in front; column with falcate deflexed wings.

Oncidium chrysorhaphis. (*G. C.* 1888, iii. 72; *O.* 1888, 199.) G. Allied to *O. cornigera*. Pseudobulbs 3–4 in. long, terete-fusiform. L. oblong-lanceolate, acute, 6–7 in. long, 1½ in. broad, glossy, dark green. Sep. and pet. broad, pale yellow, nearly covered with dark brown spots on the disk, side sep. connate. Lip with erect linear side lobes, lobed at the apex, and a large reniform emarginate front lobe; the claw has numerous tubercles upon it. Brazil.

Oncidium chrysornis. (*G. C.* 1881, xiv. 620.) G. Pseudobulbs small, narrow, ligulate, shouldered, bearing one or two cuneate lanceolate acute l., and a wide zigzag panicle with very numerous fl., which are yellow with 4 or 5 cinnamon spots. [*O. ochthodes*, Reichb. f.] Ecuador.

Oncidium crispum olivaceum. (*G. C.* 1877, vii. 40.) G. Fl. olive-green, having the basal area of the front lobe of the lip yellow, and the calli, column, wings, and a few blotches at the base of the lip purple-black. Brazil.

—— Var. **ochraceum.** (*G. C.* 1888, iv. 756.) G. A form with ochre-brown fl. without lateral crests on the sides of the middle keel of the lip.

Oncidium cristatum. (*K. B.* 1892, 210; *L.* x. t. 451.) G. Allied to *O. schillerianum*; pseudobulbs ovate, 2 in. long; l. linear, lanceolate, 6–9 in. long; panicle branched, arching, bearing numerous fl. 1½ in. across and coloured bright yellow with a few red spots on the crest of the lip. Brazil.

Oncidium crocodiliceps. (*G. C.* 1885, xxiv. 360.) G. A small species, with light green two-edged pseudobulbs scarcely larger than a hazel-nut. L. cuneate-oblong, acute. Fl. several in a one-sided raceme; sep. and pet. light greenish sulphur, striped and blotched with brown. Lip oblong-ovate, rounded or subcordate at the base, 2-lobed, white, with lilac spots, having a velvety 2-lobed callus in front of a tuft of hairs near the base. Mexico.

Oncidium cruciatum. (*G. C.* 1878, ix. 138.) G. This is the plant figured in *B. M.* t. 3926. as *O. Pubes* var. *flavescens*, from which it differs in its larger panicle of bright yellow and red fl. with a white lip, with two additional horns over the lateral lobes. Brazil.

Oncidium detortum. (*G. C.* 1888, iii. 392.) G. Something in the way of *O. serratum*, with a very long infl. Sep. shortly clawed and eared, cuneate-oblong, acute, wavy, light brown, the upper one yellowish at the apex. Pet. with shorter claws, wavy, yellow, with brown spots. Lip with spreading triangular side-lobes, and an oblong acute front-lobe; crest formed of several keels and teeth.

Oncidium dichromum. (*O. R.* 1895, 363.) G. Near *O. aureum*, with which it has been confused, but the fl. are larger, the sep. and pet. reddish purple and the lip bright yellow. The panicles are branched. Peru.

Oncidium diodon. (*G. C.* 1880, xiv. 69.) G. Pseudobulbs like those of *O. macranthum*. Fl. brown. Lip emarginate, square, with a light yellow callus.

Oncidium elegantissimum. (*G. C.* 1877, vii. 13.) G. Pseudobulbs glaucous, short, broad, ribbed, 2-leaved, producing large panicles of fl. similar to *O. curtum*, but with more shining colours. Sep. brown, with narrow yellow bands. Pet. broad, with a few yellow spots. Lip very bright yellow; the calli of the base with purplish black borders; the front limb beautifully mottled and dotted with light brown. Brazil.

Oncidium enderianum. (*G. C.* 1892, xii. 75.) G. A supposed natural hybrid between *O. crispum* and *O. curtum*.

Oncidium endocharis. (*G. C.* 1884, xxi. 206.) G. A small species with slender raceme and about 5 fl. Sep. and pet. cuneate, oblong, acute. Lip ligulate, with a broader rhombic emarginate blade with 2 large lamellæ and 3 teeth at the base, all bright orange.

Oncidium Eurycline. (*G. C.* 1884, xx. 812.) G. Near *O. uniflorum*, but larger, with blunt l.. and fl. of a thicker texture. Sep. and pet. light reddish ochre, with a few dark bars at their base; lip yellow, with a brown spot on the isthmus; basal auricles rounded, retrorse, narrower than the front blade.

Oncidium fimbriatum. (*G. C.* 1879, xi. 298.) G. In the way of *O. carnigerum*, with a long infl. with short branches. Sep. 3; upper one oblong, obtuse, galeate; lateral ones ligulate sub-acute. Pet. cuneate-oblong, obtuse, equalling the odd sep. Lip panduriate: basal auricles erect, dilate; neck longish; front lobe reniform; callus with a crutch-shaped base, denticulate along the ridge; front part deeply bilobed. Brazil.

Oncidium Forbesii borwickianum. (*G. C.* 1879, xi. 524, f. 72.) G. Lip covered with blotches instead of a one-coloured disk and spotted margin.

—— Var. **maximum.** (*L.* iv. t. 164.) G. A large-flowered form.

—— Var. **measuresianum.** (*G. C.* 1891, x. 227.) G. A var. with pure golden yellow fl. with a very narrow border of purplish brown.

Oncidium fuscatum album. (*Fl. and P.* 1882, 53.) G. Lip broad. white, marked with a lilac blotch. [*Miltonia Warscewiczii*, Reichb. f. var.]

Oncidium Gardneri flavescens. (*O. R.* 1895, 270.) G. Fl. yellowish, unspotted.

Oncidium glossomystax. (*G. C.* 1879, xii. 489.) G. A minute species with l. like an Iris. Fl. almost sessile, relatively large, light yellow, with a few brown blotches; basilar disk of the lip with two pairs of keels covered with white hairs. Mexico.

Oncidium godseffianum. (*G. C.* 1896, xix. 754.) G. A species resembling *O. Pubes*, differing in its smaller fl. and in the separation of the lateral sep. Pseudobulbs 5 in. long, cylindric, each bearing a pair of linear-lanceolate leaves: flower-scape long, slender, branching.

Oncidium grandiflorum. (*G. C.* 1881, xv. 782.) G. In the way of *O. æmulum*, but pet. more acute, and both pet. and the odd sep. more crisped, and bordered with yellow; lip with a spathulate middle lobe, a flat callus, and no middle keel. Colombia.

Oncidium gravesianum. (*G. C.* 1892, xi. 535, 650, f. 94.) G. Near *O. prætextum*. It has branched panicles of yellow and brown fl. 2 in. in diameter. South Brazil.

Oncidium guttatum roseum. (*Ill. H.* 1880, t. 390.) S. A var. with the sep. and pet. rose, mottled with white and bordered with yellow. [*O. luridum*, Lindl. var.] Mexican Cordilleras.

Oncidium hæmatochilum. (*O. R.* 1895, 174.) G. This, which was said to be a native of Colombia, is now known to be from Trinidad, and is believed to be a natural hybrid between *O. lanceanum* and *O. luridum*.

Oncidium hastatum hemimelænum. (*G. C.* 1887, ii. 127.) G. A var. with blackish purple sep. and pet. tipped, and occasionally spotted (on the pet.) with whitish green. Mexico.

—— Var. **Rœzlii.** (*G. C.* 1876, vi. 36.) G. Fl. small, yellowish, with some brown spots; column, wings and side lobes of lip yellow; middle lobe of lip brownish.

Oncidium holochrysum. (*G. C.* 1877, viii. 392.) G. Large dense nodding racemes of bright yellow fl. [*O. onustum*, Lindl.; *L.* xi. t. 498.] Ecuador.

Oncidium Hookeri. (*G. C.* 1887, ii. 520.) G. The correct name for the plant figured in *B. M.* t. 3712, as *O. raniferum*, var. *major*, which differs from *O. raniferum* in having the lateral sep. united for half their length. Brazil.

Oncidium hrubyanum. (*G. C.* 1883, xix. 562.) G. A curious species, near *O. Lietzei*, with a dense panicle of small brown fl. barred with yellow at the base of the sep. and pet.

Oncidium Huebschii. (*G. C.* 1885, xxiv. 650.) G. One of the *Pyramidale* group, with a much branched panicle of brownish yellow fl. The lip is narrower in front than at the base; its chief mark consists in the bipartite orange-coloured column-wings. Ecuador.

Oncidium incurvum album. (*Ill. H.* 1882, t. 444.) G. A var. with white fl. Mexico.

Oncidium Jamiesoni. (*G. C.* 1877, viii. 680.) G. Infl. large, with small yellow fl. spotted with violet-purple; upper sep. and the unguiculate hastate pet. with basal or median purple blotches; lip broad, pandurate, bright yellow. Peru.

Oncidium jonesianum. (*G. C.* 1883, xx. 781: *Fl. and P.* 1884, 58; *B. M.* t. 6982.) S. L. subulate, thin; sep. and pet. cuneate-oblong, wavy, erect, whitish ochre, with brown blotches; **lip with small light yellow auricles** and a white blade, marked with a few purple and brown blotches: callus of 2 patellar bodies, the smaller one in front, and traversed by a strong keel. **Paraguay.**

—— Var. **flavens.** (*H. G.* 1888. 502.) G. [*Oncidium jonesianum*, Reichb. f. var. *flavum*, **Reichb. f.**]

—— Var. **flavum.** (*G. C.* 1888. iv. 234: *W. O. A.* t. 360.] S. A var. with yellowish green spots on the sep. and pet., and yellowish lip and column.

—— Var. **phæanthum.** (*R.* ser. 1, t. 21.) S. A var. with brownish sep. and pet., a smaller crest on the lip, and no spots.

Oncidium kienastianum. (*G. C.* 1878, ix. 558.) G. L. and pseudobulbs like *O. serratum* and fl. in the way of *O. trilingue*, but with shorter bracts and differently coloured fl. which are yellowish brown in the beginning; the pet. yellow with numerous brown bars and spots. Afterwards the colour deepens and the stalked ovaries are purplish. Peru.

Oncidium kramerianum resplendens. (*G. C.* 1888, iii. 360.) G. A large brightly coloured var. with no brown margin to the wavy lip, with purple-mauve and purple-brown spots and bars; crest white in the middle.

Oncidium larkinianum. (*Gard.* 1890, xxxviii. 247; *W. O. A.* t. 405.) G. Scape branched, many-flowered; fl. coloured rich chocolate-brown and bright yellow. A natural hybrid between *O. Forbesii* and *O. marshallianum*. [Believed to be a form of *O. pectorale*, Lindl.] Organ Mts., Brazil.

Oncidium lamelligerum. (*G. C.* 1876, vi. 808.) G. In the way of *O. trifurcatum*, but with fl. twice as large. Upper sep. reniform, wavy, stalked, deep brown, with a yellow border: lower sep. longer, stalked, oblong, unequal at base, cuneate on one side, semi-hastate on the other. Pet. with broad claws, suddenly hastate, oblong, obtuse, undulate, complicate, crisp, yellowish, with brown patches. Lip trifid, with remarkable lamellæ, the side ones retrorse and lobed. Ecuador.

Oncidium lanceanum louvrexianum. (*G. C.* 1882, xvii. 218.) S. A fine var. with yellow fl. prettily spotted and marbled; lip deep mauve at base, white in front. Colombia.

—— Var. **superbum.** (*L.* i. t. 16.) S. Only distinguished by its more richly-coloured fl., the colours being brighter and more intense.

Oncidium Lansbergii. (*G. C.* 1876, v. 460.) G. Pseudobulbs minute, bearing one cuneate cordate-oblong obtuse very cartilaginous l. Fl. 3–4, in a slender raceme, yellowish green, with chestnut blotches. Venezuela.

Oncidium leopoldianum. (*G. C.* 1890, viii. 556; *L.* vi. t. 274.) S. A species of the *Cyrtochilum* section. Peduncles many-flowered; fl. 1½ in. across; sep. and pet. white, with a purple disc; lip violet-purple. Andes.

Oncidium lepturum. (*G. C.* 1886, xxv. 41.) G. One of the group with tufts of abortive fl. The properly formed fl. are light yellow, spotted with brown. Sep. and pet. cuneate-oblong, acute. Lip with a very broad heart-shaped base, narrowed into a small bifid apex; at the base is a cushion of finger-like calli. Bolivia.

Oncidium leucotis. (*G. C.* 1880, xii. 424.) G. In the way of *O. obryzatum*, with a stiffer panicle of wholly yellow fl. Colombia.

Oncidium Lietzei. (*Gfl.* t. 1044.) G. One of the 4-petalled section, with narrow compressed-terete pseudobulbs bearing one oblong-lanceolate obtuse l. Fl.-stem rising from the base of the pseudobulb, laxly panicled. Fl. dull yellow. Pet. and dorsal sep. spathulate-elliptic; lip with a narrow base, and a broad truncate-based front lobe; lateral lobes linear, acute, turned underneath like two spurs. Brazil.

—— Var. **aureo-maculatum.** (*Gfl.* t. 1279.) G. A var. with the fl. much spotted and barred with brown.

—— Var. **bicolor.** (*Gfl.* 1888, 441.) G. A small-flowered form, with brown fl. variegated with yellow.

Oncidium linguiforme. (*Gfl.* t. 973.) G. L. linear 2 ft. long; panicle large, lax. at the end of a very long weak scape. Fl. yellow, with a pale purplish lip, which is pandurate, obtuse, and has 3 keels on the basal part, the middle one much the shortest. Venezuela.

Oncidium litum. (*G. C.* 1883, xx. 328.) G. Much like *O. Forbesii*, but the callus consists of a central ligulate body, with two blunt front lobes, covered with blunt papillæ, and having on each side a curved line of papillæ. Pet. brown, with a yellow border; lip yellow, blotched with brown on the hinder part and entirely brown on the front part. A natural hybrid probably between *O. crispum* and *O. Forbesii*. Brazil.

Oncidium loxense. (*G. C.* 1884, xxii. 584, 616; *W. O. A.* t. 439; *R.* ser. 2, t. 54.) G. Pseudobulbs oblong, furrowed, two-leaved. L. cuneate, ligulate, acuminate. Fl. in a broad panicle. Sep. clawed, oblong, acute, dull olive, with cinnamon bars. Pet. shorter and broader. Lip with a tooth-like auricle on each side of the base, a short broad stalk, and a broad reniform blade, bright orange-coloured. Loxa, Peru.

Oncidium lucasianum. (*K. B.* 1894, 185; *G. C.* 1894, xv. 475, 497, f. 61.) G. Pseudobulbs ovate, diphyllous, 2 in. long; racemes erect, loose, with golden yellow fl. in the way of *O. marshallianum*.

Oncidium ludens. (*G. C.* 1885, xxiii. 756.) G. This resembles *O. annulare*, but has a different callus to the lip. Sep. rich brown verging into rich yellowish brown, the upper one with a narrow yellow border. Pet. yellow. with cinnamon-brown marbling; lip very pale, yellowish ochre, tinted with brown, marked with mauve at the base of the callus.

Oncidium lutescens. (*G. C.* 1887, i. 799.) G. Allied to *O. metallicum*, differing in the long wavy dorsal sep., the 3-toothed crest of the lip, and acute column-wings. Dorsal sep. dark brown with yellow recurved margin; lateral sep. greenish brown; pet. very short, auricled, hastate-triangular, wavy. dark brown with a yellow edge; lip oblong, short. dark greenish at the angled base, purple on the front part.

Oncidium luteum. (*K. B.* 1893, 172.) G. Allied to *O. chrysopyramis*. Pseudobulbs ovate. over 1 in. long; l. 4 in. long; panicle 18 in. long; fl. numerous, small, light yellow.

Oncidium macranthum williamsianum. (*G. C.* 1880, xiv. 8.) G. A very curious var., bearing on each pet. a rather large reniform blotch. Tropical America.

Oncidium maculatum psittacinum. (*G. C.* 1888, iv. 378.) G. A var. in which the sep. and pet. of the yellow fl. are much blotched.

Oncidium Mantini. (*O.* 1888, 47, t.; *G. C.* 1888, iii. 235; *R. H.* 1888, 98.) G. Pseudobulbs ovoid, with two strap-shaped emarginate l. and a raceme of large fl. Upper sep. and the very large pet. chocolate-brown, with yellow borders, spotted with chocolate-brown. Side sep. united at the base (?), chocolate-brown, with yellow bars. Lip with a narrow oblong base, and a very large reniform lobulate front lobe, yellow spotted with bright reddish brown. [A natural hybrid, a form of *O. pectorale*, Lindl.] Brazil.

Oncidium Massangei. (*B. H.* 1877, 124, t. 6–7.) G. In the way of *O. pictum* and *O. sphacellatum*. L. linear. acute, 1 ft. or more long, 1½ in. broad. Fl. in a long racemose panicle: perianth 1 in. in diameter; sep. and pet. oblanceolate, acute, yellow, blotched to just above their middle with purple-brown; lip with oblong truncate spreading auricles at its base, and a broad dilated bilobed front part, yellow, with a band of purple-brown across the base of each auricle and at the base of the dilated front part; crest also spotted with purple-brown. Central America.

Oncidium Meirax. (*G. C.* 1880, xiv. 358.) G. A species with an infl. of 2 fl. spotted with little yellow and brown spots. Venezuela.

Oncidium melanops. (*G. C.* 1880, xiv. 620.) G. Resembling *O. chrysomis* in habit. Fl. light yellow, with the base of the sep., pet. and lip blackish purple. Ecuador.

Oncidium meliosmum. (*G. C.* 1882, xvii. 796.) G. A species with fl. of a rich yellow, blotched with cinnamon.

Oncidium metallicum. (*G. C.* 1876, v. 394.) G. Fl. chestnut-brown, metallic-hued; borders of the upper sep. and smaller pet. blotched with rich yellow: long-stalked lateral sep. yellowish at their tips: callus whitish. The pet. auricled: the lip pandurate, with a projecting angle from each side, an isthmus in the middle, and a hastate blade before. Colombia.

Oncidium millianum. (*G. C.* 1878, x. 364.) G. Fl. in a large much-branched panicle, rather large, yellow, mottled with brown: sep. and pet. equal: lip bent at the base; column very short, two-winged, with 2 tumid cheeks below the stigma. Colombia.

Oncidium monachicum. (*G. C.* 1883, xix. 368–9, f. 54.) G. A fine species, with large chocolate-brown fl., the undulate pet. and dorsal sep. edged with light yellow; lateral sep. stalked, elliptic, spreading. Colombia.

Oncidium murinum. (*G. C.* 1888, iii. 619.) G. A pretty, but small-flowered species, with a large panicle of numerous yellow fl., having the columns of a dull crimson-purple. Lip triangular, sessile, fleshy, with two roundish crests on the disk. Ecuador.

Oncidium nodosum. (*Gfl.* t. 1017, figured as *O. papilioniforme.*) G. [This is *O. kramerianum*, Reichb. f.]

Oncidium obryzatum dasystalix. (*G. C.* 1880, xii. 456.) G. A trifling var. with a velvety base to the lip. Colombia.

Oncidium ornithopodum. (*G. C.* 1879, xii. 200.) G. Much like *O. ansiferum*, but distinguished by its smaller fl. and singular trifid callus, with a solid beak-like median tooth and excavate lateral angles. Tropical America.

Oncidium ornithorhynchum album (*F. M.* t. 398.) G. A var. with sweet-scented white fl. with a yellow crest. Mexico.

Oncidium orthotis. (*Ill. H.* 1888, t. 69.) G. A small but interesting species, with peculiarly shaped fl. Pseudobulbs small, compressed, ovate, with one cuneate-oblong l. 1½–2 in. long. Fl.-stem about 9 in. long, with 5–6 branches, which terminate in a single fl. about ¾ in. in diam. and bear 1 or 2 abortive fl. Sep. and pet. linear-lanceolate, acute, yellow, barred with brown; upper sep. reflexed; lateral sep. hanging straight down; pet. widely spreading. Lip broadly cordate, with a short triangular-acute point, and a crest of two series of tubercles in groups of 3, yellow with brown markings.

Oncidium panduratum. (*K. B.* 1895, 9.) G. Allied to *O. anthocrene*, but with smaller and more numerous fl. coloured red-brown and yellow. Colombia.

Oncidium Papilio Eckhardti. (*Ill. H.* 1883, t. 500; *Fl. and P.* 1883, 170.) S. A large-flowered var., only differing from the type in size.

—— Var. **majus.** (*L.* iii, t. 138.) S. [Identical with var. *Eckhardti*, Linden, but perhaps not var. *majus*, Reichb. f.]

Oncidium pardoglossum. (*G. C.* 1886, xxv. 617.) G. An interesting species, with narrow chestnut-coloured fl., much marked with yellow on the lip, and having a very obscure yellow band on the dorsal sep. The column is very long, light yellow, with brown-purple wings.

Oncidium phylloglossum. (*G. C.* 1881, xv. 169.) G. Allied to *O. Ventilabrum.* Fl. shining, light brown, the wavy sep. and pet. bordered with light yellow. Lip with yellow borders at the base and a white top; calli yellow. Colombia.

Oncidium pollettianum. (*G. C.* 1886, xxvi. 326.) G. Raceme many-flowered. Fl. large. Sepals yellow, with brown bands; lateral sep. connate and two-toothed at the apex; dorsal sep. oblong, acute; pet. brown, with yellow borders. Lip with small roundish auricles at the base, a long narrow neck, and broad 4-lobed blade, the outer lobes broadest. A natural hybrid, probably between *O. dasytyle* and *O. Forbesii.*

Oncidium præstans. (*G. C.* 1880, xiv. 296.) G. A natural hybrid, probably between *O. dasystyle* and some species like *O. Gardneri*. It has brighter colours than the first, but has not the blackish border of the basilar part of the lip, and it resembles the last in its system of calli.

Oncidium prætextum. (*G. C.* 1881, xv. 720.) G. In the way of *O. Gardneri*. Auricles of the lip narrow, angled; isthmus broad; front lobe reniform, lobed; crest of several calli and keels.

—— **Var. bellum.** (*G. C.* 1884, xxi. 372.) G. A var. with a yellow lip, having numerous brown spots on the disk, and an interrupted border of brown blotches.

Oncidium pyxidophorum. (*G. C.* 1879, xii. 136.) G. Much like *O. Pubes* and *O. carnigerum*, but the fl. quite yellow, with a little box at the base of the lip, and serrulate wings to the column.

Oncidium refractum. (*O. R.* 1894, 229.) G. Allied to *O. zebrinum*; the fl. greenish yellow with brown bars; the sep. and pet. wavy and pointed; the column and lip reflexed. Colombia.

Oncidium robustissimum. (*G. C.* 1888, iv. 352.) G. Allied to *O. pulvinatum*, *sphegiferum*, &c., but with stout straight branches to the panicles, and larger fl. Sep. and pet. brown at the base, yellow at the apex. Lip yellow, with brown stripes; side lobes rounded, serrate. Brazil.

Oncidium rolfeanum. (*G. C.* 1892, xii. 34.) G. Of the *Microchila* section and allied to *O. kienastianum*; with a long branching raceme of yellow and brown fl. Colombia.

Oncidium russellianum pallidum. (*Gfl.* t. 1012.) G. A form with the sep. and pet. olive-coloured, and the lip lilac, white at the apex. [*Miltonia russelliana*, Lindl. var.] Brazil.

Oncidium saintlegerianum. (*G. C.* 1892, xii. 582, 672.) G. Allied to *O. bifolium*, with oblong pseudobulbs, linear lanceolate l. 8 in. by 1 in. Scape 18 in. long, bearing several fl., which are yellow, with a large conspicuous crest coloured bright purple. [*O. spilopterum*, Lindl.] South Brazil.

Oncidium saltabundum. (*G. C.* 1883, xix. 720.) G. In the way of *O. porrigens*, with a zigzag infl., bearing short-lipped small ochre fl. blotched with brown. Colombia.

Oncidium sanderianum. (*K. B.* 1893, 337; *G. and F.* vi. 336, 515.) G. Allied to *O. serratum*. It is described as free flowering with thickly branched scapes of large rosy red blossoms, but these have also been described as chocolate-brown. Peru.

Oncidium sarcodes discoidale. (*G. C.* 1886, xxv. 488.) G. A trifling var. without spots on the front lobe of the lip.

Oncidium stelligerum Ernesti. (*W. O. A.* t. 260; *G. C.* 1887, i. 15.) G. A var. with pale yellow fl. with large rounded brown spots on the sep. and pet., and a reddish purple front lobe to the lip. Mexico.

Oncidium stipitatum platyonyx. (*G. C.* 1878, ix. 788.) G. A var. with long terete furrowed l. Fl. very numerous and smaller than the type, with the nail of the lip broader, and on each side of the anterior callus a ridge. Panama.

Oncidium teretifolium. (*Fl. and P.* 1882, 90.) G. An attractive species, with thickish erect terete l., and erect many-flowered panicles of small bright yellow fl.

—— **Var. albens.** (*G. C.* 1877, vii. 772.) G. A var. with pale yellowish white fl. and a yellow anther.

—— Var. **lugens.** (*G. C.* 1886, xxvi. 553.) G. A var. with the sep. and pet. of a uniform dark reddish brown inside, the tips being yellow and the dorsal keels green.

Oncidium tricuspidatum. (*G. C.* 1884, xxii. 70.) G. Pseudobulbs narrow, with a leaf at their apex and base; fl. panicled; peduncle longer than the l. Sep. orange with a brown midline; pet. pale sulphur-coloured, with small brown spots and brown back; lip very shortly cuneate at the base, with a large oblong 2-lobed blade, sulphur-coloured, with bars at the base. Costa Rica.

Oncidium trifurcatum. (*G. C.* 1883, xx. 556.) G. In the way of *O. serratum*, but with free petals. The borders of the reniform blades of the sepals

and petals light yellow ; lip crimson-lake, with light yellow calli : the stigma standing over 2 sword-like projections. Colombia (?).

Oncidium unicolor. (*O. R.* 1893, 266.) G. Allied to *O. uniflorum*, but of more robust habit with larger fl., which are of a uniform yellow colour. Brazil.

Oncidium unicorne lætum. (*G. C.* 1882, xvii. 764.) G. A var. with a very broad pandurate lip, white blotched with purple-mauve, with a horn of the same colour, and having some teeth on the lower side, and an orange callus.

—— Var. **pictum.** (*G. C.* 1881, xiv. 652.) G. Sep. and pet. whitish, blotched with dark Indian-purple : lip lemon-yellow, with dark brown blotches.

Oncidium urophyllum. (*G. C.* 1891, ix. 701.) S. Figured by Lindley in 1841 from a plant in the Loddiges collection, said to have been imported from Brazil. It has recently been reintroduced to Kew from the island of Antigua. It has a drooping panicle, 4 ft. long, of clear yellow fl. with a few brown markings.

Oncidium ustulatum. (*G. C.* 1883, xix. 340.) G. Much in the way of *O. metallicum*. Fl. brown, with a light border to the sep., some yellowish lines on the borders of the pet., and the front lobe of the lip reddish purple. Sep. and pet. crisped ; callus very broad, with spreading linear ligulate lamellæ, yellow with brown lines and dots. Colombia.

—— Var. **varicosum giganteum.** (*G. C.* 1896, xix. 655.) G. Fl. much larger than in the type. Brazil.

Oncidium virgulatum. (*G. C.* 1876, vi. 452.) G. Peduncle bearing numerous zigzag branches and heteromorphous fl., the one form small without a column, the other much like the fl. of *O. Cheiri*, but with very different callosities, the most remarkable of which are two side-ridges starting from the base of the chief callus. Colombia.

Oncidium Weltoni superbum. (*R. H.* 1881. 450, t.) G. A var. with a rich raceme of large fl. : sep. and pet. undulate, brownish, with white tips ; lip roundish, bifid, red, with a violet-tinted disk ; callus yellow ; border white. [*Miltonia Warszewiczii*, Lindl. var.]

Oncidium wheatleyanum. (*Gard.* 1893, xliv. 227 ; *O. R.* 1895, 6 ; *G. C.* 1894, xvi. 605.) G. A natural hybrid. Probably a var. of *O. Gardneri*, with purple-brown sep. and pet. ; lip yellow, edged with brown : crest large and purple.

Oncidium Widgreni. (*G. C.* 1889, v. 557.) G. Allied to *O. cornigerum*, but with far brighter colours, the fl. being bright yellow with bars of light reddish brown. Brazil.

Oncidium xanthocentron. (*G. C.* 1880, xiii. 104.) G. The infl. is a dense panicle. The pet. are hastate, and have a dark spot over the base. The lip is of a dark colour, with a rhomboid yellow centre. The contrast of colours is very marked. Andes.

Oncidium zebrinum brunneum. (*G. C.* 1876, vi. 580.) G. Only differs from the type in having the sep. and pet. marked with brown instead of violet-purple.

Oncidium zonatum. (*J. O.* 1893, 76.) G. Allied to *O. bryolophotum*. It has heteromorphous fl., the sep. white, the pet. yellow with transverse brown bands. Colombia.

Onobrychis laconica. (*G. C.* 1892, xii. 615.) Leguminosæ. H. Fl. large, bright pink ; foliage glaucous. Servia.

Onoseris drakeana. (*R. H.* 1883, 180. t.) Compositæ. G. shrubby per., with petiolate cordate-ovate acute l., white-tomentose beneath, and long-peduncled heads of bright purple fl. Colombia.

Onosma albo-roseum. (*G. and F.* 1890, 523.) Boraginaceæ. H. per. L. hoary grey ; fl. white, after a few days changing to deep rose. Asia Minor.

Onosma pyramidalis. (*B. M.* t. 6987 : *G. C.* 1888, iii. 305 ; *G. and F.* 1888, 60.) G. or H. H. hispid per. L. in a large dense rosette, linear-lanceolate, acute, 10-12 in. long ; fl.-stem stout, branching, leafy, 1½-2 ft. high. Fl. in short densely bracteate scorpioid drooping racemes. Calyx-lobes linear-lanceolate, very spreading. Corolla urceolate, bright scarlet. Himalaya.

Oplismenus Burmanni albidulum. (*G. C.* 1886, xxvi. 776.) Gramineæ. G. or S. A pretty little grass of dwarfer and more compact habit than the common variegated form (*Panicum variegatum* of gardens), having the l. mostly white, with a green stripe along the midrib. India.

Opuntia Davisii. (*B. M.* t. 6652.) Cactaceæ. G. A small shrubby species, remarkable for the bronzy greenish colour of the fl. Stems tuberculate, terete. ½ in. in diam., spines 5–6 in a tuft about ½ in. long. Fl. 2 in. in diam. New Mexico.

Opuntia fulgida. (*G. and F.* 1895, 324, f. 46.) G. An arboreal species attaining a height of 15 ft. and branching freely. Joints short, ovate-cylindric, very spiny, spines 1 in. long; fl. small, bright pink, fading to purple. Arizona.

Opuntia lucida. (*W. G.* 1889, 146.) G. 3–4 ft. high, having the branches covered with a net-work of shining spines, and producing large rose-like fragrant yellow fl.

Opuntia Pœppigii. (*Gfl.* t. 1129, f. 1–4.) G. A species forming a dwarf bush with short cylindric branches bearing incurved cylindric l., solitary spreading spines ½–¾ in. long, and sessile or shortly stalked pale yellow fl. 2 in. in diam., having an exceedingly short ovary about ⅓ in. long. Chile.

Opuntia Segethi. (*Gfl.* t. 1129, f. 5.) G. Of similar habit to *O. Pœppigii*, but with a longer fl., the ovary being 3½ in. long, with a few cylindric spreading bracts, 1 in. long; corolla 1½ in. in diam., pale pink. Chile.

Opuntia polyacantha. (*B. M* t. 7046.) G. The proper name of the plant cultivated in gardens as *O. missouriensis*.

Opuntia rhodantha. (*M. D. G.* 1896, 29.) G. Corolla and filaments red; ovary smooth. Colorado.

Opuntia subulata. (*G. C.* 1883, xix. 627.) A change of the generic name of *Pereskia subulata*.

Opuntia tetracantha. (*G. and F.* 1896, 432.) G. Allied to *O. Thurberi*. It is a branched shrub 2 to 5 ft. high, the stem and joints cylindric, covered with prominent tubercles bearing tufts of brown bristles and straw-coloured flattened deflexed loosely sheathed spines. Fl. greenish purple; fr. ovate, bright scarlet. Arizona.

Opuntia xanthostema. (*M. D. G.* 1896, 29.) G. A species with carmine-red fl., dark yellow filaments and a prickly ovary. Colorado.

Orania nivea. (*Cat. Comp. Cont. d'Hort.* 1886, 8.) Palmæ. S. Palm of vigorous growth with large shining green l., white on their under surface.

Orchidantha borneensis. (*G. C.* 1886, xxvi. 519; *Cat. Comp. Cont. d'Hort.* 1886, 7.) Scitamineæ. S. per. A remarkable plant, resembling a dwarf *Heliconia* in foliage, but with fl. resembling those of an orchid. It is of dwarf habit, with elliptic-oblong acuminate bright green l. 6–8 in. long by 2½–3 in. broad, on petioles 5–10 in. long. The fl. are produced in short spikes close to the ground. Sep. narrow, linear-lanceolate, acute, 1 in. long, yellowish at the base, purplish towards the apex. Pet. linear, obtuse, aristate, 3½ lines long, blackish violet. Lip linear, acuminate, 1 in. long, blackish violet. Stamens 5. [*Lowia borneensis*, Hort.] Borneo.

Orchis pauciflora. (*Gfl.* t. 1149, f. 2.) Orchidaceæ. H. H. A terrestrial orchid, with linear-lanceolate l. and a spike of yellow fl.; the lip dark yellow and sometimes spotted. Italy.

Oreodoxa granatensis. (*Bull Cat.* 1880, 6.) Palmæ. S. A smooth-stemmed Palm, with pinnate l. Leaflets long, narrow, and drooping. Colombia.

Oreopanax andreanum. (*R. H.* 1882, 523, ff. 117–8.) Araliaceæ. G. shr. with a simple or slightly branched trunk; l. petiolate, elliptic, roundish, or sub-cordiform and sub-trilobed, entire or palmate with pinnatifid lobes, covered beneath as well as the petioles and branches with a reddish deciduous tomentum. Fl. in globular heads arranged in a terminal erect raceme. Ecuador.

Oreopanax epremesnilianum. (*R. H.* 1882, 557.) G. shr. with long-petioled large digitate l.; leaflets 7–9, the two outer ones oblong, entire, narrowed at both ends, the middle one pinnatifid. Infl. like that of *O. dactylifolium*, of which it is probably only a variety.

Oreopanax sanderianum. (*G. C.* 1892, xi. 718; 1893, xiii. 451.) S. Similar in habit to *Fatsia papyrifera*. L. mostly three-lobed, but variable in shape, leathery in texture, green. Fl. small in globose heads. Guatemala.

Oreopanax Thibautii. (*B. M.* t. 6340.) S. A small tree stellate-pubescent on the young parts. L. on rather long petioles, digitately 5-foliolate; leaflets lanceolate, acuminate, dark green, paler beneath. Inf. a long terminal raceme of small globose heads of densely packed greenish fl. Mexico.

Origanum hybridum. (*G. C.* 1888, iii. 232, f. 37.) Labiatæ. H. per. known in gardens as *O. pulchellum* and *O. Tournefortii*. Levant.

Orithyia oxypetala. (*Gfl.* t. 987, f. 2.) Liliaceæ. H. L. 2, lanceolate, overtopping the short one-flowered scape. Fl. yellow. The three outer segments green on the back; all about 1 in. long. [*Tulipa uniflora*, Bess.] Altai.

Orixa japonica. (*Gfl.* t. 1232.) Celastraceæ. H. shrub with oblong acute slightly bullate dark green l., 1–1½ in. long, and racemes of inconspicuous green fl., arising from the sides of the branches some distance above the leaf-axils. [*Celastrus Orixa*, Sieb. & Zucc.] Japan.

Ornithidium fragrans. (*K. B.* 1894, 157.) Orchidaceæ. G. Allied to *O. densum*, but with shorter l. and fewer but larger fl., which are whitish, suffused with purple, and fragrant.

Ornithidium nanum. (*K. B.* 1894, 395.) G. A species with very small pseudobulbs, l. and scapes 1 in. long, and small yellowish fl. West Indies.

Ornithidium ochraceum. (*G. C.* 1887, i. 209.) G. An unattractive plant with distant elliptic two-edged pseudobulbs on an ascending stem, bearing one apical and one basal cuneate-oblong unequally acute l. Fl. few and very small; sep. and pet. ochraceous, with a few purple spots; lip white with the disk of front lobe ochre, dotted with mauve. Colombia.

Ornithocephalus grandiflorus. (*G. C.* 1882, xviii. 168; *B. H.* 1884, t. 6.) Orchidaceæ. S. The finest of the genus, with large oblong obtuse l. and a raceme of white fl. Brazil.

Ornithochilus fuscus. (*G. C.* 1888, iv. 210; *B. M.* t. 7385.) Orchidaceæ. S. A small plant with fleshy oblong l. about 4 in. long, unequally 2-lobed at the apex. Racemes axillary, pendant, with numerous small brownish yellow fl. marked with purple lines. Lip 3-lobed, the middle lobe erect, horse-shoe-shaped, fringed, reddish purple; spur conical. Burma.

Ornithogalum albovirens. (*G. C.* 1878, x. 364.) Liliaceæ. G. L. linear, glabrous, 1–1½ ft. long, ½–¾ in. broad. Fl. dull white, with a green dorsal stripe on each segment, disposed in a moderately dense raceme. Natal.

Ornithogalum apertiflorum. (*G. C.* 1889, vi. 38.) G. Allied to *O. narbonnense*. L. slender, 6 in. long; spike 18 in. long; fl. greenish white, ¾ in. across. Orient.

Ornithogalum armeniacum. (*G. C.* 1879, xi. 748.) G. Species with numerous inrolled subulate hairy l., and corymbose white fl. keeled with green. Armenia.

Ornithogalum aurantiacum. (*G. C.* 1878, x. 748.) G. L. two to a bulb, slender, erect, subulate, contemporary with the fl. 1½–2 in. long. Scape slender, 3–4 in. long, with 1–2 fl. Perianth campanulate, ⅜ in. long, bright orange yellow, without a dorsal band on the back of the segments. Stamens shorter than the perianth: filaments linear-subulate: anthers minute, yellow. South Africa.

Ornithogalum natalense. (*G. M.* 1893, 557.) G. This species is very closely allied to *O. hispidum*, and is found at an altitude of 6,800 ft. Natal.

Ornithogalum revolutum. (*G. and F.* 1896, 323.) G. An ally of *O. arabicum*, having narrow l. 9 in. long, erect scapes 12 in. long, and a subumbellate raceme of about 20 fl., each 1½ in. wide, glistening white, with an eye-like blotch of olive-brown. South Africa.

Ornithogalum Saundersiæ. (*G. C.* 1891, x. 452.) G. Allied to *O. arabicum*. Scape 3 ft. high, bearing an umbel of about 20 fl., 1 in. across, white, tinged outside with green. Transvaal.

Orphanidesia gaultherioides. (*Vat. Arb. Zösch.* 1891, 17; *Gfl.* 1891, 469, f. 87.) Ericaceæ. H. A dwarf shrubby

plant with prostrate leafy branches covered with stiff hairs and glands. L. oblong, acute, rough beneath. Peduncles 1–2-flowered; calyx-lobes large and the corolla hypocrateriform. Caucasus.

Orthocarpus purpurascens. (*Gfl.* t. 1166.) Scrophulariaceæ. H. H. annual of dwarf habit, with light green pinnatisect l., the divisions linear, acute. Fl. in short ovoid heads. The pinnatisect bracts, calyx-lobes and corolla purple. California.

Orthrosanthus chimboracensis. (*G. C.* 1876, vi. 67.) Iridaceæ. G. per. with a short oblique woody rhizome, bearing clusters of distichous grass-like l., 1 ft. long. Fl.-stem 1 ft. or more high, with 2 3 reduced leaves. Fl. in a lax narrow panicle, several to a spathe, fugitive, and opening in succession. Peruvian Andes.

Osbeckia rostrata. (*B. M.* t. 6575.) Melastomaceæ, G. Stem 4-angled; angles winged. L. 3–10 in. long, elliptic lanceolate or lanceolate, acuminate, denticulate, dark green above, purple-stained beneath; petioles purple. Cymes terminal, lax. Fl. 2–2½ in. in diam., bright mauve-purple; pet. broad, roundish; stamens yellow. Himalaya.

Osmunda japonica corymbifera. (*Fl. and P.* 1882, 122.) Filices. G. A var. with crested fronds.

Osmunda javanica. (*Fl. and P.* 1882, 122.) S. evergreen fern, 1–2 ft. high. Fronds leathery, pinnate; the lower or central pinnæ fertile; barren pinnæ lanceolate, 4–8 in. long, entire or toothed. Java.

Osteocarpus rostratus. (*Gfl.* t. 1175, f. a–e.) Solanaceæ. G. or H. H. A pretty little prostrate herb, with linear terete l., and *Convolvulus*-like bright blue fl.; buds pointed. Chile.

Osteomeles anthyllidifolia. (*Lemoine Cat.* 1893; *G. C.* 1893, xiv. 628, 743.) Rosaceæ. H. H. shr. with twiggy branches, pinnate l. and corymbs of white fragrant hawthorn-like fl. It forms extensive thickets in Upper Burma, and is eaten by cattle. China; India, &c.

Ostrowskia magnifica. (*Gfl.* 1887, 638, f. 160; *B. M.* t. 7472.) Campanulaceæ. H. per. 4–5 ft. high, with whorls of large lanceolate acute-toothed l., and a terminal raceme of large long-stalked erect blue fl. Calyx with a series of linear pores at the base of the long linear acute segments. Corolla campanulate, 3 in. long and as much in breadth. Central Asia.

Ottelia ovalifolia. (*R. H.* 1885, 469; *G. C.* 1886, xxv. 753, f. 165.) Hydrocharidaceæ. S. aquatic, with a spreading rosette of elliptic-oblong floating l., something like those of *Aponogeton distachyum*, and large white fl. with numerous yellow stamens. Australia.

Oxalis anthelminthica. (*Damm. Cat.* 1893, 5.) Geraniaceæ. G. species with purple or lilac fl. Abyssinia.

Oxalis articulata. (*B. M.* t. 6748.) G. Rootstock stout, woody, 2–3 in. high; l. trifoliate, with broadly obcordate leaflets of a bright green, with reddish margins; scapes elongate, bearing umbels of bright mauve-pink fl. 1 in. in diam. Argentina.

Oxalis binervis. (*Acta Hort. Petrop.* 1890, xi. 312.) G. A tuberous species. L. with 3 deeply bifid leaflets; the lanceolate-oblong lobes subfalcate and two-nerved, dark purple beneath. Fl. 3–7 in an umbel, white.

Oxalis catharinensis. (*G. C.* 1887, i. 140.) G. species with a scaly rhizome; l. with three triangular leaflets, truncate at apex with rounded angles and a very slight notch in the middle. Peduncles 4–15-flowered; fl. white, with very narrow cuneate-oblong pet. Santa Catharina, Brazil.

Oxalis enneaphylla. (*B. M.* t. 6256.) H. dwarf per. L. digitate, leaflets 9–20, whorled, in 2–3 series, obcordate, glaucous, rather fleshy. Peduncles as long as petioles, bibracteate, 1-flowered. Fl. 1–1½ in. in diam., white or pale rose, with purple veins. Falkland Islands.

Oxalis imbricata, flore pleno. (*G. C.* 1887, ii. 681, f. 129.) G. A tuberous species with hairy l. ½ in. in diam., having three broadly obcordate leaflets, which often overlap each other. Peduncles hairy, 3–4 in. high, bearing one double rose-pink fl. South Africa.

Oxera pulchella. (*B. M.* t. 6938; *G. C.* 1886, xxvi. 786; 1887, ii. 108.) Verbenaceæ. S. A handsome free-flowering climber of striking appearance, quite glabrous. L. opposite, 2–5

in. long, lanceolate, obtusely pointed, entire, or with large crenations, bright green. Fl. large and showy, 2 in. long, funnel-shaped, with oblong lobes, greenish white, pendulous in several-flowered axillary cymes; stamens 2, much exserted, with two short rudimentary ones between them. New Caledonia.

Oxybaphus californicus. (*Gfl.* t. 1266, f. 2.) Nyctaginaceæ. H. per. 1–2 ft. high, procumbent at the base, viscid on the stem and l. L. opposite, petiolate, broadly ovate, obtuse or subacute, subcordate at the base. Fl. solitary, axillary, funnel-shaped, purple, on pedicels about ½ in. long. California.

Oxytenanthera abyssinica. (*K. B.* 1893, 341.) Gramineæ. S. A tall-growing bamboo which is widely distributed in Africa, with canes 3 in. wide at the base, and lanceolate l. 6 in. long.

Oxytropis frigida racemosa. (*Gfl.* t. 1154, f. 2, f–k.) Leguminosæ. H. stemless per. with erect pinnate l., 3–4 in. long, having narrow-lanceolate leaflets of a glaucous hue, and covered with adpressed hairs; peduncles longer than the l., hairy. Fl. ½ in. long, arranged in a short spike-like raceme. Turkestan.

Oxytropis ochroleuca. (*Gfl.* t. 1154, f. 1, a–e.) H. per., with short ascending glaucescent stem, pinnate l., 3–4 in. long, with oblong-lanceolate leaflets, and long-peduncled short racemes of small drooping yellowish white fl.; peduncles, calyx, and ovary covered with blackish hairs. Turkestan.

Pachyrhizus thunbergianus. (*F. G.* 1889, 153; *G. C.* 1891, ix. 247.) Leguminosæ. H. per. climber, with trifoliate l. and violet fl. marked with a yellow spot on the upper pet. [*Pueraria thunbergiana*, Benth.; *Gfl.* t. 1429.] Japan.

Pachysandra terminalis. (*G. C.* 1882, xviii. 230.) Euphorbiaceæ. H. Herbaceous per. of low stature. L. broadly cuneate, obovate, coriaceous, green with whitish marginal variegation, crowded towards the ends of the shoots. Japan.

Pachystima Myrsinites. (*H. G.* 1888, 559; *W. G.* 1888, 440.) Celastraceæ. H. shr. formerly known as *Myginda myrtifolia*. [*Pachistima Myrsinites*, Rafin.]

Pachystoma thompsonianum. (*G. C.* 1879, xii. 582, 624–5, f. 102–3; *B. M.* t. 6471.) Orchidaceæ. S. Pseudo-bulbs depressed, orbicular, each with an erect lanceolate-acute l. 6–8 in. long, and producing 1 or 2 erect slender pubescent 2-flowered peduncles shorter than the l. Fl. 2 in. in diam., white, with a purple 3-lobed lip, the lateral lobes of which are oblong and erect, and the middle lobe attenuate into a recurved point. West Tropical Africa.

Pæonia Bakeri. (*J. R. H. S.* xii. 441, f. 32.) Ranunculaceæ. H. per. about 2 ft. high, with a stout pilose reddish stem, bearing about 6 bi-ternately divided l., with broadly ovate acute leaflets, the terminal one 3-lobed, hairy and glaucous beneath. Fl. about 4½ in. in diam., deep rose. [Syn. *P. peregrina*, Mill. var. *byzantina*, Hort.]

Pæonia lutea. (*W. G.* 1893, 30; *Jard.* 1897, 216, t.) G. A yellow-flowered Tree-Pæony. Yunnan, China.

Palicourea jugosa. (*Bull Cat.* 1886, 8.) Rubiaceæ. S. shr. with opposite elliptic-oblong dark satiny green l. with depressed midribs and veins; under surface purple. Brazil.

Palicourea nicotianæfolia. (*B. M.* t. 7001; *G. C.* 1888, iii. 722.) S. L. opposite, petiolate, lanceolate, acuminate, 5–9 in. long, bright green, the midrib and nerves yellowish above, purplish beneath. Panicle terminal, rather narrow, 4–7 in. long; the peduncle and branches red, pubescent; corolla tubular, 5-toothed, ½ in. long, greenish yellow. Fruit compressed, ⅛ in. in diam. violet. Brazil.

Palisota bicolor. (*G. C.* 1878, ix. 527.) Commelinaceæ. S. foliage plant of dwarf tufted habit. L. 12–14 in. long, 5–5½ in. broad, on thick fleshy petioles 4–5 in. long, oblong-ovate, acute; its upper surface glabrous, bright green with a broad central greenish yellow area; under surface more or less clothed with brown woolly pubescence. Fernando Po.

Palisota Maclaudi. (*J. H. F.* 1896, 466.) S. A near ally of *P. thyrsiflora*, but differing by its much longer narrower rather long-stalked l., by the hairs of the sheaths and stalks being black and not brown, and by its more woody stem. Upper Guinea.

Panax armatum. (*Bull Cat.* 1876, 3, under *Aralia armata*.) Araliaceæ. S. Stems erect, prickly. L. bipinnate; petiole long prickly; rhachis articulated; leaflets ovate. acuminate, membranous, serrated, beset on both sides with bristly hairs. Fl. in a long downy panicle of many-flowered umbels. India.

Panax crispatum. (*Bull Cat.* 1888, 9; *L'Hort. Int. Cat.* 1888–9, 52.) S. shr. of dwarf compact habit. L. triangular, pinnate, with several pairs of overlapping leaflets, and a terminal one, all deeply incised and toothed on the margin. Brazil.

Panax diffissum. (*Bull Cat.* 1883, 15.) S. A var. of *P. fruticosum* with bright green bipinnate crisped l.; leaflets linear-oblong, lobed and spine-toothed. Polynesia.

Panax dissectum. (*Bull Cat.* 1882, 17.) S. shr. of erect branching habit, with numerous drooping bipinnate l.; leaflets cuneate-obovate, often bilobed. toothed.

Panax dumosum. (*Bull Cat.* 1883. 15.) S. shr. with short stems thickly clothed with roundish-ovate pinnately divided green l.; the ultimate divisions are very variable in form, with spinulose-toothed margins.

Panax elegans. (*Williams' Cat.* 1880, 17.) S. shr. of dense habit, with finely-divided l.

Panax fissum. (*Bull Cat.* 1884. 14.) S. shr. with a branched stem, marked with pallid spots: l. tripinnate. with linear-lanceolate whitish-toothed leaflets. Polynesia.

Panax fruticosum deleauanum. (*Ill. H.* 1883, t. 492: *Fl. and P.* 1883, 92.) S. shr. with digitately compound l.; the divisions ternately or biternately divided; the segments varying from linear-cuneate to obliquely sub-elliptic, irregularly lobed and toothed, green with whitish-tipped teeth. [Syn. *Aralia deleauana*, Hort.] Polynesia.

—— Var. **multifidum.** (*G. C.* 1887, i. 544; *Veitch Cat.* 1887, 11.) S. A form having a compact plumose crown of tripinnatisect l., with linear or linear-lanceolate segments $\frac{1}{4}$–$\frac{1}{2}$ in. long, tipped with a short white bristle, and often with bristle-tipped teeth on their margins.

Panax laciniatum. (*Veitch Cat.* 1877. 24; *Bull Cat.* 1877, 7.) S. [A form of *P. fruticosum*, Linn.] South Sea Islands.

Panax lepidum. (*Bull Cat.* 1888, 9; *L'Hort. Int. Cat.* 1888–9, 52.) S. shr. of compact dense habit. L. biternately divided, the leading division largest; pinnules of the secondary divisions obliquely obovate. with the inner sides of the two lateral ones almost covering the small central pinnule, which is deflexed and sometimes almost rudimentary; the margins are deeply incised and spinosely toothed. Brazil.

Panax Murrayi. (*B. M.* t. 6798.) S. tree, very ornamental in the young state, with drooping pinnate l., 3–4 ft. long. with numerous oblong-lanceolate leaflets 3–6 in. long, bright shining green. Umbels 1 in. in diam., arranged in long terminal racemes: fl. pale reddish brown. Polynesia.

Panax nitidum. (*Bull Cat.* 1888, 9; *L'Hort. Int. Cat.* 1888–9, 52.) S. shr. of dense compact habit. L. roundish-obovate, toothed and slightly spinose, the front part sometimes with two or more incisions. Brazil.

Panax ornatum. (*Bull Cat.* 1888, 9; *L'Hort. Int. Cat.* 1888–9, 52.) S. shr. with long pinnate l., the leaflets being narrow-lanceolate. and deeply and bluntly toothed on the margins. Brazil.

Panax plumatum. (*Bull Cat.* 1879, 6. f. 6.) S. shr. L. bipinnate: pinnules pinnatisect, sharply toothed. The plant is something like *P. laciniatum*, but the l. are more finely cut. South Sea Islands.

Panax serratifolium. (*Williams' Cat.* 1883, 28.) S. Probably a form of *P. fruticosa* with compound l., the leaflets serrated at the edge, stem and petioles marked with brown. Polynesia.

Panax Victoriæ. (*G. C.* 1883, xix. 404, 405, f. 60: *Bull Cat.* 1883, 15, t. 10; *Fl. and P.* 1883, 58.) S. This is a var. of *P. fruticosa* with variegated foliage. Polynesia.

Pancratium parviflorum. (*Gn.* 1885, 310.) Amaryllidaceæ. G. A small-flowered species with broad linear acuminate l. about 1 ft. long; scape

shorter than the l.; umbel of 7–8 white fl., 1½ in. in diam. The stamens have a broad base with an erect tooth on each side. [*Vagaria parviflora*, Herb.] Syria.

Pancratium trianthum. (*B. T. O.* 1894, 229.) S. A species with a globose bulb 1–2 in. in diam. having a long neck and bearing 6–8 narrow straight l. about 1 ft. long. Peduncle short, slender, bearing 1–3 white fl. in an umbel. Tropical Africa.

Pandanophyllum humile. (*Bull Cut.* 1879, 6.) Cyperaceæ. S. per. of dwarf tufted habit, with broad linear arching l. having thread-like terminations, furnished with 3 ribs, giving a peculiar channelled appearance. [*Mapania humilis*, F. Villar.] Java.

Pandanophyllum Wendlandi. (*Cut. Comp. Cont. d'Hort.* 7.) S. [*Mapania humilis*, F. Villar.]

Pandanus augustianus. (*Ill. H.* 1886, t. 612.) Pandanaceæ. S. foliage plant allied to *P. Kerchovei*, but with a taller stem, and broader and more densely toothed l. with green denticulate nerves. New Guinea.

Pandanus caricosus. (*R. H.* 1878, 405, f. 84.) S. shr. of rather dwarf habit, branching at the base, with narrow channelled glaucous l. not very spiny. Infl. erect, terminal, dense, about 8 in. long by 2½ in. thick; bracts and fl. yellowish white. Moluccas.

Pandanus ceramicus. (*G. C.* 1888, iv. 631, also as *ceramensis*.) S. Stem 1½ in. thick, bearing a crown of linear l. about 3 ft. long, by 1½ in. broad, spiny on the margins and on the apex of the keel. Peduncle 1 ft. long, bearing a cluster of ellipsoidal cones, about 2½ in. long, by 1¾ in. thick, of a scarlet colour when ripe. [*Pandanus labyrinthicus*, Kurz; *B. M.* t. 7063.]

Pandanus discolor. (*Bull Cut.* 1884, 14.) S. A bold-looking plant with 2 slightly raised ridges on the upper surface of the serrate l. Young foliage of a bronzy hue.

Pandanus dyerianus. (*G. C.* 1892, xi. 731.) S. [*P. Baptistii*, Veitch.]

Pandanus grusonianus. (*Ill. H.* 1887, t. 12.) S. screw-pine allied to *P. Kerchovei*, with numerous linear l. 3 ft. long, ¾–1 in. broad, densely serrated with red spines. Admiralty Isles.

Pandanus Kerchovei. (*Ill. H.* 1886. t. 600; *Cut. Comp. Cont. d'Hort.* 1886, 10.) S. A *Pandanus* with long and very narrow bright green l. armed with whitish spines. Admiralty Isles.

Pandanus pacificus. (*G. C.* 1892. xi. 664.) S. A plant with broad shining green l.; margins clothed with fine spines; apices narrowed abruptly to a long tail-like point. Pacific Islands.

Pandanus Pancheri. (*Ill. H.* 1877, t. 288.) S. Screw-pine with linear l. 3–5 ft. long, and about 2 in. broad; margins spinose-toothed, carinate beneath; lower half of the carina reddish and strongly spinose-toothed. New Caledonia.

Pandanus unguifer. (*B. M.* t. 6347.) S. Stems slender, about 3 ft. long, prostrate. L. sub-distichous, 1½–2 ft. long, 1–2 in. broad, gracefully recurving, keeled; margins spinulose. Fruit sub-erect, as large as the fist, composed of about 150 yellow drupes; drupe with a hemispherical top, terminated by a short brownish claw-like spine. [*P. minor*, Buch.-Ham.] Bengal.

Panicum italicum japonicum. (*Gfl.* 1887, 278, f. 72.) Gramineæ. H. Cultivated var. of *Setaria italica*.

Panicum tonsum. (*B. T. O.* 1895, 254.) H. A per. with a light feathery silvery infl. South Africa.

Papaver californicum. (*F. G.* 1890. 403.) Papaveraceæ. H. An ornamental poppy over 1 ft. in height, with fl. about 2–2½ in. in diam., of a clear orange, with a yellow centre. California.

Papaver glaucum. (*Gfl.* 1891, 608, f. 116–7.) H. annual. A distinct species with pinnatifid glaucous l. and solitary fl. 3–4 in. in diam. of a deep scarlet-red colour, and remarkable in having the pet. arranged in the form of a double cup. Armenia.

Papaver Hookeri. (*B. M.* t. 6729.) H. annual, flowering continuously in the autumn for several weeks. A large bushy herb 3–4 ft. high; stigmatic rays 12–20. Fl. varying from pale-rose to crimson-scarlet, with a diffused white or blue-black blotch at the base. "The Shirley Poppy." [*P. Rhœas*, Linn. var. *latifolium*, Buch.-Ham.] India.

Papaver lævigatum. (*G. C.* 1889, v. 20, f. 4; *Gard.* 1889, xxxvi. 17.) H. A handsome annual species. Stems much branched, 1–2 ft. high; l. pinnate; fl. 3–4 in. in diam. dark scarlet, with a black blotch at the base of each pet. Orient.

Papaver pavoninum. (*Gfl.* t. 1095, f. 3-4.: *G. C.* 1886, xxvi. 328-9, f. 67.) H. annual with rather small bipinnatifid l., and scarlet fl., with a black horse-shoe shaped blotch near the base of each pet.; ovary and capsule setose. Turkestan, &c.

Papaver Pollaki. (*W. G.* 1888, 272.) H. per. something in the way of *P. orientale*, but with more finely cut l., and smaller dark cherry-red fl. Persia.

Papaver rupifragum atlanticum. (*B. M.* t. 7107; *Gfl.* 1890, 394.) H. A showy per. poppy. Stems many, 1–2 ft. high, hairy; l. 6–8 in. long, oblanceolate, obtuse, pinnate. bright green. Buds drooping. Fl. 2–3 in. in diam., orange-red or scarlet. Morocco.

Papaya gracilis. (*Gfl.* t. 986.) Passifloraceæ. S. shr. with a simple stem 4–6 ft. high, with a crown of long-stalked 3–5-parted l. with the segments pinnatifid. Fl. rather small, in pedunculate lax corymbose cymes. [*Carica gracilis*, Hort.; Syn. *Vasconcella gracilis*, Hort.] Colombia.

Paphinia cristata modiglianiana. (*G. C.* 1888, iii. 72, 235; *L.* iii. t. 117; *O.* 1888, 200.) Orchidaceæ. S. A var. with whitish flowers. [*Lycaste cristata*, Nichols. Syn. *P. Modiglianii*; *B. T. O.* 1888, 58.] Brazil.

Paphinia grandis. (*W. O. A.* t. 145.) S. A curious orchid with large fl. of a chocolate-brown, barred on the lower half of the lanceolate acuminate sep. and pet. with yellowish green and cream; edges pale; lip with a blackish purple claw, widening into an oblong obtuse cream-coloured front lobe, which is hairy on the apical portion, and has a pair of oblong lobes on each side of it, the two basal ones being incurved and pale chocolate-brown, and the two front ones horizontal and blackish purple. [*Lycaste grandis*, Nichols.] Brazil.

Paphinia lindeniana. (*L.* iii. t. 106.) S. A handsome species with oblong-ovoid pseudobulbs 2–2½ in. long, elliptic acute l., and racemes of large showy fl. Sep. and pet. lanceolate, acuminate; the central part dark red-purple (broken up into lines and spots on the sep.); the margin white. Lip white, with a dark purple-brown base; front lobe hastate, with numerous filiform and papillate crests. [*Lycaste lindeniana*, Nichols.] Orinoco.

Paphinia Randi. (*L.* i. t. 30.) S. Allied to *P. cristata*, with ellipsoid pseudobulbs 1 in. long, lanceolate acute l. 3–4 in. long, and a peduncle bearing two fl., 2½ in. in expanse. Sep. and pet. lanceolate, acuminate, purple-red, transversely barred at the base, and longitudinally striped along the margins with white. The cristate lip marked with the same colours. [*Lycaste Randi*, Nichols.]

Paphinia rugosa. (*G. C.* 1879, xii. 520; xiv. 102.) S. Sep. and pet. pale ochre. with yellow tips, numerously spotted with brown-purple. Lip dark purple, with white appendices; its border and the tips of the lateral falcate lobes are yellow-brown. [*Lycaste rugosa*, Nichols.] Colombia.

—— Var. **Kalbreyeri.** (*G. C.* 1880, xiv. 778.) S. A var. with longer pseudobulbs than in the type. Sep. whitish ochre. with irregular cinnamon-purple markings. Pet. cinnamon-purple, with a narrow cinnamon-brown border. Lip with dark purple angles and horns and a few purple spots.

—— Var. **sanderiana.** (*G. C.* 1879, xii. 520.) S. A var. having soft yellow fl. with very few brown spots. Lip white, with purple blotches.

Papperitzia Leiboldi. (*G. C.* 1886, xxvi. 680.) Orchidaceæ. S. A small orchid with lax pendulous racemes of small green flowers. Mexico.

Paradisanthus Moseni. (*G. C.* 1881, xv. 298.) Orchidaceæ. S. Oblong compressed pseudobulbs 2 in. long, bearing oblong l. The sep. are green with a few brown bars; lip with two angles underneath, white with mauve stripes in the basilar hollow. Brazil.

Parnassia nubicola. (*B. M.* t. 6609.) Saxifragaceæ. H. Radical l. petiolate, elliptic, sub-cordate; stem-l. solitary, sessile, elliptic. Peduncle 4-angled, 6–12 in. high. Fl. solitary, 1–1½ in. in diam., white. Staminodes three-lobed, yellow. Himalaya.

Parrya macrocarpa. (*Gfl.* t. 1126.) Cruciferæ. H. per. A rock-plant of small size. L. all radical, petiolate, elliptic-oblong, acute, entire. 2–3 in. long. Fl.-stem leafless; corymb 6–8-flowered; fl. 1 in. across, lilac; petals obcordate. Arctic regions.

Pasithea cœrulea. (*B. M.* t. 7249.) Liliaceæ. G. Allied to the Asphodels, with grassy l., and with long branched scapes of blue star-shaped fl. Chile.

Passiflora atomaria. (*G. C.* 1883, xix. 693, f. 115; *R. H.* 1883, 201, f. 39.) Passifloraceæ. G. [*P. alba*, Link & Otto.] Colombia.

Passiflora atropurpurea. (*G. C.* 1883, xix. 499.) G. Garden hybrid between *P. racemosa* and *P. Londini*.

Passiflora chelidonea. (*G. C.* 1879, xii. 40, f. 5.) S. climber, with oblong l., bifid to a quarter of their length, with a short middle tooth; base rounded, shining green above, pubescent and pale purplish beneath. Fl. 2 in. in diam., greenish. Ecuador.

Passiflora galbana. (*G. C.* 1896, xx. 555, f. 97.) S. A species with entire lanceolate l. 3 in. long and greenish yellow fl. 3 in. across. Brazil.

Passiflora kewensis. (*Jard.* 1888, 201; *G. and F.* 1888, 292.) G. Garden hybrid between *P. raddiana* and *P. cærulea*.

Passiflora Miersii. (*G. C.* 1888, iv. 352, f. 46.) S. A small species, with ovate-lanceolate entire l., cordate at the base, claret-coloured beneath. Fl. about 2 in. in diam., white, flushed with pink; outer coronal threads white, barred with purple at the base; inner threads violet or deep purple. Brazil.

Passiflora Pfordtii. (*Gard.* 1889, xxxv. 572.) A garden hybrid between *P. alata* and *P. cærulea*. It is synonymous with *P. Munroi*.

Passiflora triloba. (*Ill. H.* 1889, 53, t. 83.) S. A handsome climber with cordate entire or three-lobed l.: fl. 3 in. in diam.; sep. and pet. reflexed, violet: coronal threads numerous, violet, banded with white: the outer short; the inner long, linear, erect, forming a sort of cup around the stamens and pistil. Peru.

Passiflora violacea. (*B. H.* 1885, 468, t.; *B. M.* t. 6997.) G. or S. species with 3-lobed l., large obliquely semi-cordate stipules, and long-peduncled fl., 3 in. in diam. Sep. and pet. oblong, obtuse, pale lilac: outer coronal filaments blue in the middle, white at the base and tips; the inner coronal filaments shorter, violet. Brazil.

Passiflora vitifolia. (*F. M.* t. 317.) S. climber with vine-like foliage and large vermilion-red fl. Also grown under the wrong name of *Tacsonia Buchanani*. Panama.

Passiflora watsoniana. (*G. C.* 1886, xxvi. 648, f. 126–7; *Gfl.* 1887, 340.) G. climber with 3-lobed l. about 2–2½ in. long by 3 in. broad, green above, violet beneath. Fl. about 3 in. in diam. Sep. narrow-oblong, horned at the apex, green, with a whitish margin outside, white flushed with violet inside. Pet. similar to sep. delicate lilac. Corona of several rows of erect threads, the outer rows twice as long as the inner, violet, barred with white. Brazil?

Passiflora weberiana. (*R. H.* 1885, 113; 1887, 324, t.) G. Stem covered with glandular hairs. L. large, 3–5 in. long, 4½–9 in. broad, 3-lobed; the lobes broadly ovate-oblong, acute, sinuate, toothed; the base deeply cordate; stipules leafy, falcate-oblong; peduncles axillary, solitary, or two together. Fl. 2 in. in diam., white; the filaments of the corona banded with white; ovary densely setose. Argentina.

Paulowilhelmia speciosa. (*G. C.* 1889, vi. 749, f. 106.) Acanthaceæ. G. A herbaceous shrub allied to *Ruellia*, differing only in having the lobes of the corolla spreading fan-like. The plant attains a height of 2 ft., has cordate toothed l. and terminal panicles of blue fl. Tropical Africa.

Pavetta natalensis. (*Bull Cut.* 1888, 9, f.; *L'Hort. Int. Cut.* 1888 9, 52.) Rubiaceæ. S. shr. with lanceolate-oblong acute dark green opposite l., and large hemispherical cymes of *Ixora*-like white fl., with long exserted styles. Natal.

Pavonia makoyana. (*B. H.* 1878, 59, t. 3.) Malvaceæ. S. shr. much in the way of *P. Wioti*. L. elongate-lanceolate, serrate, green, with yellowish midrib, deflexed. Inflorescence terminal, racemose. Epicalyx 5-leaved, longer than the calyx, deep rose; segments cordate, ovate, acute. Corolla

blackish purple except the base, which is rosy. Stamens and style much exserted; anthers blue; stigmas rose-red. [*Gœthea makoyana*, Hook. f.; *B. M.* t. 6427.] Brazil.

Pavonia multiflora. (*B. M.* t. 6398) S. [Syn. *Pavonia Wioti*, Hort.]

Pedicularis dolichorrhiza. (*Gfl.* 1884, 54, f.) Scrophulariaceæ. H. herb having pinnate l. with toothed leaflets and a terminal spike with golden yellow fl.; the upper lip of the corolla curved down into a short straight beak; lower lip 3-lobed. Central Asia.

Pedicularis megalantha. (*B. M.* t. 7132.) H. Stems hairy, 1-2 ft. high; l. 2–10 in. long, twice pinnatifid; lower bracts longer than the fl.; fl. rose-purple. Himalaya.

Pedicularis megalantha. (*Gfl.* t. 943.) H. Dwarf herb with oblong stalked pinnatisect l., the segments of which are pinnatifid. Fl. in a bracteate raceme, rather large for this genus, bright yellow. [*P. Hoffmeisteri*, Klotzsch.] Himalaya, &c.

Pelargonium multibracteatum. (*W. G.* 1892, 477, f. 78.) Geraniaceæ. G. species with trailing stems, deeply lobed l., of a bronzy green, marked with a dark zone, and numerous umbels of white fl. Abyssinia.

Pelargonium saxifragoides. (*G. C.* 1890, viii. 154; *Gfl.* 1890, 477.) G. Belonging to the same group as the "ivy-leaved geranium." Dwarf, compact, with bright green fleshy *Saxifraga*-like l. and small pink and purple fl. South Africa.

Pelexia maculata. (*K. B.* 1893, 7.) Orchidaceæ. S. Species with shining olive-green l. blotched with grey above and purplish below. Scape 12 in. long, purple, clothed with sheaths and bracts, and bearing green pink-tipped fl.

Pelexia olivacea. (*K. B.* 1891, 200.) S. An unattractive species with dull olive-green l. marked with two silvery bands. Scape and fl. pubescent; sep. olive-green; pet. and lip white. Andes.

Pelexia saccata. (*K. B.* 1895, 195.) S. Allied to *P. maculata*. L. ovate, 6 in. long, 2 in. wide, light green, prettily marbled with grey. Raceme 6 in. long; fl. small, green, with a whitish lip. Guatemala.

Pelexia Travassosii. (*G. C.* 1892, xi. 330.) S. with olive-green l. spotted with white, and erect scapes, 1 ft. high; fl. white. [*P. roseo-alba*, Reichb. f.] Brazil.

Pelexia wendlandiana. (*G. C.* 1892, xi. 426.) S. Stem 2 ft. high, bearing a spike of greenish brown fl. with a white lip.

Peliosanthes albida. (*B. M.* t. 7110.) Hæmodoraceæ. S. A dwarf plant with a tuft of elegant plicate green l., and an erect spicate infl. bearing numerous small white fl. Malay Peninsula.

Pellionia daveauana. (*G. C.* 1880, xiv. 262.) Urticaceæ. S. This is the plant described and figured in *R. H.* 1880, 290, as *Begonia* (?) *daveauana*. It is a dwarf creeping herb with small *Begonia*-like l. of a rich olive or violet-tinted green, with a central greyish green band. Cochin China.

—— **Var. viridis.** (*G. C.* 1882, xviii. 712.) S. Differs from the type in having uniform bright green l., or here and there indistinctly blotched with white. [Syn. *P. daveauana*, N. E. Br. var. *argentea*, Lind. Cat. 1883, 4.] Cochin China.

Pellionia pulchra. (*G. C.* 1883, xviii. 712; *Ill. H.* 1883, t. 479; *Lind. Cat.* 1883, 4.) S. per. in the way of *P. daveauana*, differing in its oblong very obtuse l. of a dull blackish colour along the midrib and veins, the interspaces being green. Cochin China.

Pennisetum giganteum. (*Gfl.* 1884, 25.) Gramineæ. S. A tall ornamental grass 5–6 ft. high, with narrow linear-lanceolate l., and slender pedunculate nodding spikes solitary or two together, from the upper axils.

Pennisetum longistylum violaceum. (*W. G.* 1888, 436.) H. annual grass, with long metallic-violet awns to the spike.

Pennisetum ruppelianum. (*Ill. H.* 1895, 206, f.) H. [*P. Ruppellii*, Steud.]

Pennisetum Ruppellii. (*B. T. O.* 1894, 155.) H. An annual grass about a yard in height. Abyssinia.

Pennisetum triflorum. (*Jard.* 1891, 213.) G. An ornamental grass with elegant tail-like white or purple fl.-spikes growing to 1 ft. in length. [*P. orientale*, Nees.] India.

Pennisetum villosum. (*Jard.* 1891, 213, f.) S. per., or may be treated as a H. H. annual. An ornamental grass of tufted habit, with long dense plumose white spikes. Abyssinia.

Pentachæta aurea. (*Gfl.* t. 1153.) Compositæ. H. A pretty little dwarf annual with alternate linear subulate l., and radiate golden yellow fl.-heads 1 in. in diam., solitary at the ends of the branches. [*P. bellidiflora*, Greene.] California.

Pentapera sicula. (*B. M.* t. 7030; *G. C.* 1888, iv. 670.) Ericaceæ. G. shr. 1–2 ft. high, with linear heath-like l. $\frac{1}{3}$–$\frac{1}{2}$ in. long, and terminal 4–5-flowered umbels of nodding urceolate white fl. $\frac{1}{3}$ in. long, with linear spreading pink calyx-segments. Stamens 5, included. Ovary pubescent. [Syn. *Erica sicula*, Guss.] Sicily.

Pentapterygium serpens. (*B. M.* t. 6777.) Vacciniaceæ. G. small shr. of graceful appearance, with a large tuberous root-stock, slender drooping stems, small lanceolate l., and numerous axillary fl. hanging along the under side of the branches. Calyx 5-angled, green; corolla $\frac{3}{4}$ in. long, 5-angled, bright red with darker V-shaped marks. Himalaya.

Pentas quartiniana. (*W. G.* 1893, 143, f. 31.) Rubiaceæ. S. A var. of *P. carnea*, finer and flowering more freely than the type. Abyssinia.

Pentstemon Cobæa purpureus. (*Fl. and P.* 1882, 26.) Scrophulariaceæ. H. var. with large rich purple fl. shaded with violet.

Pentstemon Eatoni. (*Fl. and P.* 1883, 27.) H. per., 1½ ft. high; lower l. broadly ovate; fl. in terminal panicles, rich crimson-scarlet; corolla widening towards the mouth; lobes nearly equal. California.

Pentstemon Gordoni splendens. (*Gfl.* 1895, 77, f. 25.) H. A hardy per. with a rosette of spathulate l. and a tall infl. of dark blue fl. [*P. glaber*, Pursh.] North America.

Pentstemon grandiflorus. (*Gfl.* t. 900.) H. A bold and handsome species with glaucous green sessile or subsessile oblong or elliptic-oblong obtuse apiculate l., and racemes of large pale purple fl., yellow at the base of the tube; tube inflated above; limb spreading. 5-lobed, 2-lipped. North America.

Pentstemon labrosus. (*G. C.* 1883, xx. 536–7, f. 91; *Fl. and P.* 1883, 185; *R. H.* 1884, 384; *B. M.* t. 6738.) H. per. growing to 5 ft. high, with opposite linear-lanceolate l., and large panicles of bright scarlet-red fl. California.

Pentstemon Menziesii Scouleri. (*H. G.* 1888, 560; *W. G.* 1889, 363.) H. per. [*P. Scouleri*, Dougl.]

Penstemon puniceus. (*W. G.* 1889, 198; *Gard.* 1890, xxxviii. 147.) H. H. per. about 2½ ft. high, with smooth shining l. of a greyish tint, and an abundance of scarlet fl. North Mexico.

Pentstemon rotundifolius. (*G. C.* 1888, iv. 264–5, f. 31; *G. and F.* 1888, 472, f. 73; *B. M.* t. 7055.) H. per. herb of attractive appearance, about 2 ft. high, with opposite roundish or broadly ovate glaucous l., those on the stem being sessile; fl. laxly paniculate, bright brick-red, about 1 in. long. Mexico.

Pentstemon secundiflorus. (*Gard.* 1896, xlix. 478.) H. Fl. blue, suffused with bronze on the upper surface. Colorado.

Pentstemon Watsoni. (*Gfl.* 1896, 77.) H. A dwarf-growing compact species with roundish l. and racemes of blackish blue fl. Colorado.

Peperomia argyreia, foliis variegatis. (*W. G.* 1888, 297, t. 3.) S. Piperaceæ. Garden variety.

Peperomia inquilina. (*G. C.* 1892. xii. 428.) S. A small trailing species with red stems, and small fleshy orbicular green l. Central America.

Peperomia metallica. (*Ill. H.* 1892, t. 157.) S. herb, about 1 ft. high, with alternate dark green l. with a pale greenish stripe along the midrib, and reddish veins beneath. Peru.

Peperomia prostrata. (*G. C.* 1879, xi. 716, f. 102.) S. with slender creeping stems, and alternate round variegated leaves.

Perezia sonchifolia. (*R. H.* 1896, 134, t.) Compositæ. H. A pretty annual with Thistle-like l. and white fl.-heads like miniature Camellias. Uruguay.

Pericome caudata. (*G. C.* 1880, xiv. 498.) Compositæ. H. H. shr. per. 3–4 ft. high, with opposite cordate-deltoid long taper-pointed l. and umbellate panicles of yellow fl.-heads. Colorado.

Perilla arguta atropurpurea. (*W. G.* 1888, 340.) Labiatæ. H. H. A form of the plant well known under the name of *P. nankinensis*. China.

Perilla heteromorpha. (*R. H.* 1879, 271, f. 55–8.) H. H. [*P. ocymoides*, Linn.]

Peristeria aspersa. (*L.* vi. t. 267; *W. O. A.* t. 327.) Orchidaceæ. G. An interesting species in the way of *P. Rossii*, having a short raceme with about 10 large yellow-brown fl. covered with brownish red dots, and the front of the lip dark crimson. Venezuela.

Peristeria Ephippium. (*G. C.* 1883, xx. 198.) S. Allied to *P. pendula*, with broadly linear fleshy arms to the column, and a rhomboid 3-lobed epichile to the lip; callus broad, ribbed and furrowed; ribs meeting and prolonged in a thick line to the apex of the middle lobe. Andes (?)

Peristeria læta. (*G. C.* 1887, ii. 616.) S. Something in the way of *P. cerina*. Pseudobulbs narrow, light green. L. long, narrow, and thin. Fl. bright yellow; sep. and pet. with dark purple spots; lip paler, dotted with Indian-purple.

Peristeria Lindeni. (*L.* vii. t. 328; *J. O.* iii. 97, f. 12.) S. A distinct plant with broad plicate l. and short racemes of globose fl. The light ground colour is washed with dark purple, and thickly spotted with a darker purple.

Peristeria rossiana. (*G. C.* 1889, v. 8; *B. T. O.* 1889, 138.) S. Allied to *P. pendula*, differing only in the lip and column.

Peristeria selligera. (*G. C.* 1887, ii. 272.) S. Very similar to *P. pendula*, but with an armless column, and a saddle-shaped crest to the lip. Demerara.

Pernettya floribunda. (*G. C.* 1883, xviii. 648, f. 113.) Ericaceæ. H. shr. in the way of *P. mucronata*, of which it is probably a var., but more free-flowering, and with larger crimson berries. Extra-tropical South America.

Persica vulgaris præcox. (*R. H.* 1878, 180.) Rosaceæ. H. var. of the double-flowered peach, which commences to flower some days earlier than the common form. [*Prunus Persica*, Stokes, var.]

Pescatorea backhousiana. (*G. C.* 1877, viii. 456.) Orchidaceæ. S. Fl. as large as those of *P. cerina*; sep. and pet. purplish violet; lip cream-coloured, with a deep callus of 19 ribs running out in angles and keeled with brown; in front of the callus are some sulphur-coloured warts, and the exterior of the lip is light purple. [*Zygopetalum backhousianum*, Reichb. f.] Ecuador (?)

Pescatorea bella. (*G. C.* 1878, ix. 492.) S. Fl. larger than *P. cerina*; sep. and pet. light whitish violet, having near their tips a very broad band of very dark purplish violet; lip rather hooded, whitish yellow, with a very large 21-ribbed callus; the ribs purplish on their back line; tip of lip with a large purplish-brown blotch. [*Zygopetalum bellum*, Reichb. f.] Colombia (?)

Pescatorea dormaniana. (*G. C.* 1881, xv. 330.) S. In the way of *P. Klabochorum* and *P. Lehmanni*, distinguished by its narrower fl.; column with a sagittate base; lip with a continuous row of angles on the hind margin of the side lobes, and three prolonged connate median keels. Fl. white, with some light sulphur on the crest. Colombia (?)

Pescatorea euglossa. (*G. C.* 1876, vi. 808.) S. Rather near *P. Roezlii*, with shorter lip and broader different callus; tip of lip bent underneath, ending in two diverging lobes. [*Zygopetalum euglossum*, Reichb. f.] Ecuador.

Pescatorea fimbriata. (*Gfl.* t. 1008.) S. The peduncles are short and 1-flowered. Fl. about 2 in. in diam. Sep. and pet. elliptic-oblong, acute; basal half white; apical half purple. Lip with revolute irregularly fringed margins, yellowish white dotted with rose-colour. Crest semicircular, composed of 17–19 dark purple ridges. Colombia.

Pescatorea gairiana. (*G. C.* 1879, xi. 684.) S. Sep. and pet. deep violet, the apical part inside black-purple. Lip rose-coloured, the callus covering half of it and having 15–17 radiating keels; front part of the lip with obscure radiating keels and numerous warts between them. [*Zygopetalum gairianum*, Reichb. f.] Colombia?

Pescatorea Klabochorum. (*G. C.* 1879, xi. 684; xii. 167; *W. O. A.* t. 17.) S. Distinct, and with very large fl. Sep. and pet. white, with chocolate tips. Lip with small lateral auricles; callus with 19 lamellæ, and several radiating hairy and styliform processes around it, ochre-coloured, with brown bars on the keels. [*Zygopetalum Klabochorum*, Reichb. f.] Colombia.

—— Var. **burfordiensis.** (*G. C.* 1879, xii. 167.) S. A var. of the above, with broader darker lamellæ on the callus, the broad middle line of front part of lip dark reddish violet, and the whole surface covered with styliform processes.

—— Var. **ornatissima.** (*G. C.* 1884, xxi. 76.) S. A fine var. with very dark mauve-purple tips, and numerous similar spots at the base of the pet., and a single spot at the base of the odd sep.

Pescatoria Roezlii. (*G. C.* 1877, vii. 620.) S. Fl. large, white, with all the segments tipped with violaceous blue. Lip with the tip broad and reflexed, somewhat resembling the tail of a swallow. [*Zygopetalum Roezlii*, Reichb. f.] Ecuador.

Pescatoria Lehmanni. (*G. C.* 1892, xii. 424; *W. O. A.* t. 57.) S. Fl. violet. The sep. and pet. unusually broad and long. The anterior part of the lip oblong, revolute, retuse, and covered all over with long bristle-like papillæ. L. 1 ft. or more long, and scarcely 1 in. broad. [*Zygopetalum Lehmanni*, Reichb. f.] Andes.

Pescatorea ruckeriana. (*G. C.* 1885, xxiv. 424.) S. Much in the way of *P. dayana*, with twisting undulate acute sep. and pet. which are white, with a large light purple area near the green apex. The lip appears triangular, being revolute on each side and rolled underneath at the top. It is purple, with a white callus, and some yellow at the base of the side lobes.

Pescatorea russeliana. (*G. C.* 1878, x. 524.) S. In the way of P. *dayana*, with the lip of *P. Roezlii*, but having the keels of the crest running out into prominent angles outside, excepting the single straight middle keel; colours of the species just named, but only the lip and tips of sep. and pet. are reddish purple; column yellowish in front, with a lemon yellow area at the base. [*Zygopetalum russelianum*, Reichb. f.]

Pescatorea Verväeti. (*G. C.* 1882, x. 792; *Fl. and P.* 1883, 10.) S. Allied to *P. Klabochorum*; sep. and pet. waxy white, tipped with claret-crimson; lip entirely claret-crimson.

Peumus fragrans. (*B. M.* t. 7024; *G. C.* 1888, iv. 573.) Monimiaceæ. G. evergreen shr. This is the plant known as *Boldoa fragrans*.

Phacelia campanularia. (*G. C.* 1882, xviii. 51; *Fl. and P.* 1882, 122; *B. M.* t. 6735.) Hydrophyllaceæ. H. annual, 6–8 in. high, much branched. L. stalked, roundish-oblong, crenate. Fl. large, broadly campanulate, deep blue, with a white spot at the base of each sinus. California.

Phacelia orcuttiana. (*W. G.* 1890, 403.) H. A viscid annual, with pinnatifid l. and white fl. having a yellow centre. California.

Phacelia Parryi. (*B. M.* t. 6842; *Gfl.* t. 1207; *R. H.* 1885, 557.) H. herb. annual, clothed with viscid hairs. L. 1–4 in. long, ovate, coarsely toothed, petiolate. Fl. in elongating terminal scorpioid racemes. Corolla 1 in. in diam., campanulate-rotate, shortly 5-lobed, violet, with five yellowish spots at the throat of the short tube. Filaments hairy. California.

Phædranassa Lehmanni. (*Gfl.* t. 1138; *Fl. and P.* 1884, 28.) Amaryllidaceæ. G. bulb, with a solitary stalked elliptic-lanceolate acute l., dark green above, glaucous beneath, and a pedunculate 3-flowered umbel of nodding scarlet fl. Perianth tubular, 1 in. long, with shortly spreading tips. Stamens much exserted. Colombia.

Phædranassa schizantha. (*G. C.* 1880, xiv. 556.) G. This differs from the other species in cultivation in the colour of its fl. which are contemporary with the l. The tube

of the perianth is very short, green; the segments are 14–15 lin. long, connivent, bright red shading off into salmon colour at the tips. Colombia.

Phædranassa viridiflora. (*G. C.* 1877, viii. 134.) G. bulb with lanceolate l. under 1 ft. long, about 1½ in. broad, bright green. Scape terete, 1 ft. long, bearing an umbel of about four nodding narrow funnel-shaped greenish yellow fl. Ecuador.

Phaio-calanthe Arnoldiæ. (*G. C.* 1894, xv. 84.) Orchidaceæ. S. A garden hybrid between *Phaius grandifolius* and *Calanthe Regnierii.*

Phaio-calanthe berryana. (*G. C.* 1895, xviii. 655.) S. A garden hybrid between *Phaius Humblotii* and *Calanthe Masuca.*

Phaio-calanthe sedeniana. (*G. C.* 1888, iii. 136; *O.* 1888, 322.) S. A garden hybrid between *Phaius grandifolius* and *Calanthe vestita.*

—— Var. **albiflora.** (*G. C.* 1893, xiii. 80.) S. A white-flowered form of this garden hybrid.

—— Var. **rosea.** (*O. R.* 1893, 85.) S. In the type *Phaius grandifolius* was the seed-parent but in this var. it was the pollen-parent.

Phaius albus flavotinctus. (*G. C.* 1883, xx. 334.) Orchidaceæ. S. A var. with a yellow area on the front part of the lip.

Phaius amabilis. (*G. C.* 1893, xiii. 206, 226, f. 32; *O. R.* 1893. 87.) S. A garden hybrid between *P. grandifolius* and *P. tuberculosus.*

Phaius ashworthianus. (*G. C.* 1896, xx. 534.) S. A garden hybrid between *P. Mannii* and *P. maculatus.*

Phaius Blumei assamicus. (*G. C.* 1882, xvii. 558.) S. A one-flowered var. that differs much in colour, the following being some of the chief forms:—*luteo-albus;* fl. yellowish; lip light yellow, bordered with white: *purpuratus;* fl. deep yellow; lip orange, bordered with purple; pet. brown with yellow middle lines; sep. brown inside: *picturatus;* fl. pale yellow; lip yellow with the base of the side lobes mauve with purple stripes; the edges light purple with darker stripes: *oculatus;* sep. and pet. brown inside; lip yellow with a purple blotch on each side lobe. Assam; Burma.

Phaius candidissimus. (*K. B.* 1889, 101.) S. Much in the way of *P. marshallianus* with a nodding infl. Bracts greenish, longer than the ovaries. Fl. entirely white. Lip trifid, the side lobes toothed in front, the front lobe crested with filiform processes; spur inflated and 2-lobed. [Syn. *Thunia candidissima*, Reichb. f.; *G. C.* 1888, iv. 34.]

Phaius Cooksonæ. (*O. R.* 1895, 220; *G. and F.* 1895, 274.) S. A garden hybrid between *P. Humblotii* and *P. grandifolius.*

Phaius Cooksoni. (*G. C.* 1890, vii. 388, f. 57; *J. of H.* 3rd ser. xxx. 446, f. 65; *W. O. A.* t. 478.) S. A garden hybrid between *P. tuberculosus* and *P. Wallichii.*

Phaius Dodgsonii. (*F. M.* t. 329.) S. A species with the foliage of *P. alba*, and fl. in large terminal pendulous racemes. Fl. 1½ in. in diam.; sep. and pet. white; lip yellow inside, veined with red; apex white; margin denticulate. India (?)

Phaius Gravesii. (*G. and F.* 1893, vi. 169; *O. R.* 1893, 241, f. 13.) S. A garden hybrid between *P. Wallichii* and *P. grandifolius. P. hybridus* is from the same parents.

Phaius Humblotii. (*G. C.* 1880, xiv. 812; *L.* vi. t. 254; *R.* ser. 1, t. 17.) S. Fl. large, rosy, with white and red blotches; lip spurless, with a saddle-like callus on its disk running out into a small keel. Madagascar.

Phaius hybridus. (*G. C.* 1892, xi. 519.) S. A garden hybrid between *P. grandifolius* and *P. Wallichii.*

Phaius maculato-grandifolius. (*G. C.* 1891, x. 591.) S. A hybrid between the two species indicated by the specific name.

Phaius Mannii. (*G. C.* 1889, v. 714.) S. A large flowered deep-coloured var. of *P. Wallichii.*

Phaius marshallianus purpuratus. (*K. B* 1889, 101.) S. A var. with a 3-lobed lip white, spotted with purple, with five yellow keels across the disk.

and numerous yellow filiform processes: front part with numerous bright purple veins outside. [Syn. *Thunia marshalliana*, Reichb. f. var. *purpurata*, Reichb. f.; *G. C.* 1888, iv. 62.]

—— Var. **trilobus.** (*K. B.* 1889, 102.) S. A variety with a broad 3-lobed lip, having dark reddish brown veins, and 12 darker rows of toothed crests. [Syn. *Thunia marshalliana*, Reichb. f. var. *triloba*, Reichb. f.; *G. C.* 1888, iv. 62.]

Phaius Marthæ. (*G. C.* 1894, xv. 343; *R.* ser. 2, t. 90.) S. A garden hybrid between *P. Blumei* and *P. tuberculosus*.

Phaius Oweniæ. (*G. C.* 1894, xv. 539.) S. A var. of *P. bicolor* with fl. of a rich dark colour.

Phaius owenianus. (*G. C.* 1894, xv. 663, 787, f. 102.) S. A garden hybrid between *P. bicolor Oweniæ* and *P. Humblotii*.

Phaius philippinensis. (*G. C.* 1889, vi. 239.) S. Pseudobulbs 2 in. long; l. 12 18 in. long, lanceolate and plicate; scape as long as the l.; fl. 2½ in. in expanse, reddish orange-brown, lip white. Philippines.

Phaius Robertsii. (*G. C.* 1884, xxii. 428.) S. This is described as a handsome species, with brownish yellow fl. streaked with red, and the lip destitute of a spur. New Caledonia.

Phaius Rœblingii. (*G. C.* 1895, xvii. 358.) S. Pseudobulbs 10 in. long; l. 4 ft. long: fl. reddish Indian-yellow, fragrant, 5 in. across. Khasia Hills.

Phaius roseus. (*K. B.* 1893, 6.) S. L. lanceolate, 1 ft. long; scape erect, 15 in. long, bearing 6 fl., which are 2 in. across, and coloured pale rose with white spots on the lip; spur yellow. [*P. mishmensis*, Reichb. f.] Himalaya.

Phaius sanderianus. (*G. C.* 1892, xi. 598; *Gard.* 1892, xli. 430.) S. A seedling or hybrid of garden origin very like *P. Wallichii*.

Phaius sedenianus. (*G. C.* 1887, i. 174.) S. See *Phaio-calanthe sedeniana*.

Phaius Tankervilliæ Mariesii. (*G. C.* 1882, xvii. 588.) G. A form with shorter and broader sep. and pet., and a more prolonged middle lobe to the lip than in the type, and the colours also more vivid. Japan.

Phaius tuberculosus. (*G. C.* 1881, xv. 342, 428, 341, f. 67; *B. M.* t. 7307.) S. orchid with slender twisted stem bearing oblong plicate l. about 1 ft. long. Fl. 2 in. in diam. Sep. and pet. white; lip three-lobed, wavy at the margins: side lobes large, roundish, erect, yellow, spotted with purple; front lobe rosy at the margin. with a central crest of 5 yellow ridges standing in front of a tuft of yellow bristles at the base of the column. Madagascar.

Phalænopsis alcicornis. (*G. C.* 1887, i, 799.) G. Orchidaceæ. S. Something in the way of *P. grandiflora*. L. silvery green. Sep. and pet. creamy white: sep. light yellowish outside. Lip white with yellow spots on the lobed crests, nail, side lobes and keel of the nearly cross-shaped front lobe. A supposed natural hybrid, probably a form of *P. leucorrhoda*.

Phalænopsis Amphitrite. (*G. C.* 1892, xi. 618.) S. A garden hybrid beiween *P. stuartiana* and *P. sanderiana*.

Phalænopsis antennifera. (*G. C.* 1882, xviii. 520; *Williams' Cat.* 1883, 28.) S. Free-flowering, with spikes 2 ft. long of light rose-coloured fl.: side lobes of the lip striped with orange-red; middle lobe amethyst. [*P. Esmeralda*, Reichb. f.] Burma.

Phalænopsis Boxallii. (*G. C.* 1883 xix. 274.) S. A species with sulphur-coloured sep. and pet., the former barred and blotched with brown, and the latter with three longitudinal stripes; front lobe of the lip white, crescent-shaped, with blunt angles, and a central tubercle; lateral lobes erect; disk with a short bicuspidate yellow lobe with a mauve and white keel in front. Philippines.

Phalænopsis buyssoniana. (*G. C.* 1888, iv. 295; *R. H.* 1888, 434.) S. Very similar to *P. regneriana*, but brighter in colour, and differing in having the median processes on the stalk of the lip filiform-linear, instead of triangular. Sep. and pet. bright purple, the side sep. bordered inside with white. Lip bright scarlet, the side lobes ochraceous outside, with scarlet lines. Cochin China.

Phalænopsis corningiana. (*G. C.* 1879, xi. 620.) S. In the way of *P. sumatrana*. Upper sep. with longitudinal purple-brown stripes and a few transverse bars at the base; lateral sep. almost wholly purple-brown, with border and a few spots yellowish white. Pet. with longitudinal stripes and blotches; lip bent immediately before its nail, with a yellow callus, and the central part rich purple-violet; a tuft of hairs on the front of the middle line. [Probably a var. of *P. sumatrana*.]

Phalænopsis Cynthia. (*G. C.* 1890. vii. 132, 227.) S. A natural hybrid between *P. schilleriana* and *P. Aphrodite*. A form of *P. leucorrhoda*.

Phalænopsis delicata. (*G. C.* 1882, xvii. 700.) S. Near *P. rosea*. Sep. and pet. white, the latter amethyst at the base; side lobes of lip with a few brown spots at the base, and lilac stripes and tint on the middle and border; middle lobe ochraceous at the upper part of the base, lilac on the front part. [A supposed natural hybrid, probably a form of *P. intermedia*.]

Phalænopsis denticulata. (*G. C.* 1888, iii. 296; *L.* iii. 66; *O.* 1888, 164.) S. Allied to *P. sumatrana*. L. green, 6–7 in. long, 2–3 in. broad. Sep. and pet. oblong-lanceolate, acute, white, with brown spots. Lip with ligulate denticulate side-lobes, having a tubercle at the base and an oblong transverse keel outside, white with yellowish tips; front lobe ligulate, acute, concave, denticulate, with a long central keel very high towards the apex, and two forked tubercles on the disk, white with 3 mauve lines on each side.

Phalænopsis equestris leucaspis. (*G. C.* 1881, xv. 688.) S. Fl. having a white callus with brown dots, and no brown on the base of the lip. Sometimes it has a yellowish hue. [*P. rosea*, Lindl. var.] Philippines.

Phalænopsis Esmeralda. (*R. H.* 1877, 107; *W. O. A.* t. 321; *B. M.* t. 7196.) S. A small species. L. distichous, spreading, 8 in. long, 2 in. broad, somewhat granulose, marbled. Scape erect, 1 ft. high; raceme few-flowered. Fl. 1 in. in diam., rose-coloured; lip 3-lobed; lateral lobes oblong, erect; middle lobe obtuse, decurved. Cochin China.

—— Var. **candidula.** (*L.* vi. t. 263.) S. A pretty var. with white fl. having the lip streaked and flushed with rosy purple. Cambodia.

Phalænopsis Fœrstermanii. (*G. C.* 1887, i. 244.) S. A small species, with cuneate-obovate, unequally bidentate l. Peduncle two-edged. Fl. small, white, with some brown lines on the cuneate-lanceolate sep. and pet. Lateral lobes of lip with a retrorse bristle and an oblique keel outside. and a yellow callus on the inner side of each; front lobe 3-toothed, with an erect fringed crest.

Phalænopsis fugax. (*G. C.* 1893, xiv. 360.) S. A species with small green l. and small yellowish fl., which have the peculiar character of expanding at about 9 a.m. and fading at about 3 p.m. on the same day. [*Sarcochilus unguiculatus*, Lindl.] Philippines.

Phalænopsis fasciata. (*G. C.* 1882, xviii. 134.) S. In the way of *P. sumatrana*, with light yellow sep. and pet., and a light yellow lip, with crest and part of the front lobe orange, the front part of lobe being light purple. Philippines.

Phalænopsis gloriosa. (*G. C.* 1888, iii. 554; *Gard.* 1889, xxxv. t. 697.) S. Nearly allied to *P. amabilis*, with a narrow deep 2-toothed crest. Sulu Archipelago.

Phalænopsis Harriettæ. (*G. C.* 1887, ii. 8, f. 1.) S. Garden hybrid. [Syn. *P. violaceo-amabilis*, Rolfe.]

Phalænopsis intermedia brymeriana. (*G. C.* 1876, v. 36; *W. O. A.* t. 416.) S. L. 9 in. long by 2½ wide, slightly speckled, opaque. Sep. white, lateral ones purple-spotted at base. Pet. washed with purple. Front part of lip deep crimson-violet, lateral parts white, edged and blotched with deep crimson-violet. The callus yellow, with crimson blotches. Natural hybrid.

—— Var. **Vesta.** (*G. C.* 1893, xiii. 80; *O. R.* 1893, 52.) S. A garden hybrid between *P. rosea leucaspis* and *P. Aphrodite*.

Phalænopsis leucorrhoda alba. (*Fl. and P.* 1883, 42.) S. A var. with white fl., spotted with purple on the lip and base of the sep. A natural hybrid.

Phalænopsis Lindeni. (*G. C.* 1895, xviii. 36). S. A species with fl. closely resembling *P. rosea*, but much larger; l. somewhat like those of *P. schilleriana*.

Phalænopsis luddemanniana heiroglyphica. (*G. C.* 1887, ii. 586.) S. A var. with rather narrow somewhat erect l., and narrower ochraceous white sep. and pet. marked with brown circles or spots. The lip has very short side lobes, and a narrow cuneate front lobe, with a strong keel at the base and very few hairs at the convex top. Philippines.

Phalænopsis luddemanniano-amabilis. (*G. C.* 1888, iii. 331; *H. G.* 1888, 228.) S. Garden hybrid.

Phalænopsis ludde-violacea. (*G. C.* 1895, xviii. 102.) S. A garden hybrid between *P. luddemanniana* and *P. violacea*.

Phalænopsis maculata. (*G. C.* 1881, xvi. 134.) S. A small-flowered species, with pallid sep. and pet. with a few purple brown blotches. Lip with a fleshy semiterete purple central lobe, a yellow callus, purple anterior border, and numerous small spots. Borneo.

Phalænopsis Mariæ. (*W. O. A.* t. 80; *B. M.* t. 6964.) S. A species with distichous drooping oblong dark green l., and a raceme of moderate sized fl.; sep. and pet. white, with transverse blotches of chocolate-red, and a magenta-purple spot or two at their base; lip rich magenta-purple with a white edge. Sulu Archipelago; Philippines.

Phalænopsis Micholitzi. (*Gard.* 1890, xxxviii. 532.) S. Something in the way of *P. tetraspis*. It has light green l. and short spikes of creamy white fl. Philippines.

Phalænopsis regnieriana. (*G. C.* 1887, ii. 746.) S. Allied to *P. Esmeralda*, with very thick acute l., and racemes of rose-coloured fl. with a dark purple lip, which has small triangular side lobes, and a larger oblong-lanceolate apiculate front lobe, much thickened underneath, the filiform processes are represented by small white teeth, and there is also a small three-lobed white crest. Siam.

Phalænopsis reichenbachiana. (*G. C.* 1882, xviii. 586.) S. A species with many-flowered racemes of large fl.; sep. and pet. waxy whitish green, with brown markings; side lobes of the lip orange and white; central lobe mauve blue. Philippines.

Phalænopsis rothschildiana. (*G. C.* 1887, i. 606.) S. Garden hybrid between *P. schilleriana* and *P. amabilis*.

Phalænopsis sanderiana. (*G. C.* 1883, xix. 656; *Fl. and P.* 1883, 108; *W. O. A.* t. 209; *R.* ser. 2, t. 68.) S. A plant with mottled l. and large fl. of various rosy tints; lips white with brown and purple stripes and some yellow.

—— Var. **marmorata.** (*G. C.* 1883 xx. 812.) S. Sep. and pet. yellowish white outside, the lateral ones with rows of small purple spots at their base; lip marked with purple spots and stains.

Phalænopsis schilleriana advena. (*G. C.* 1885, xxiii. 174.) S. A var. with fl. having pale purple sep. and pet. and a white lip, with a yellow callus and side lobes. There are two rose-purple spots in front of the callus.

—— Var. **purpurea.** (*G. C.* 1892, xi. 105.) S. A var. with dark rosy-purple coloured fl.

—— Var. **splendens.** (*R. H.* 1886, 396, t.) S. A var. with rose-coloured fl. washed with darker colour, the side lobes of the lip white, with purple spots and washed with rose.

—— Var. **vestalis.** (*G. C.* 1882, xvii. 330.) S. A var. with white fl.

Phalænopsis speciosa. (*G. C.* 1881, xv. 562; *W. O. A.* t. 158; *L.* vi. t. 288.) S. A species with purple fl. marked on the lip and base of the pet. with white. Andamans.

—— Var. **christiana.** (*G. C.* 1882, xviii. 745, f. 131.) S. This has broader sep. and pet., the former are rose-madder, the latter white.

—— Var. **Imperatrix.** (*G. C.* 1882, xviii. 745.) S. A larger var. with rose-purple flowers.

Phalænopsis stobartiana. (*G. C.* 1877. viii. 392.) S. In the way of *P. amethystina*, with apple-green sep. and pet., ultimately yellowish green; lip amethyst-coloured, finally changing into a nearly cinnabarine-red; the lateral partitions marked with yellow and white.

Phalænopsis stuartiana. (*G. C.* 1881, xvi. 748, 753, f. 149; *Fl. and P.* 1882, 26, 49, t. 559; *B. M.* t. 6622.) S. A species with flat roots, broad oblong marbled l., and a large panicle of handsome fl. Sep. elliptic-oblong, light yellowish outside, white inside, with the lower half of the lateral ones light yellow spotted with crimson. Pet. broadly elliptic, white. Lip white, with the callus and base of the side lobes orange, the central lobe light yellow, the yellow and orange parts spotted with crimson.

—— Var. **punctatissima.** (*G. C.* 1882, xvii. 44.) S. Marked with numerous small mauve spots. Philippines.

—— Var. **bella.** (*G. C.* 1888, iii. 200.) S. A var. with red linear spots on the side lobes of the lip, and large purple-brown blotches on the middle lobe.

—— Var. **hrubyana.** (*G. C.* 1884, xxi. 372.) S. A var. having the pet. and sep. purple at the back, and bordered with white.

—— Var. **punctulata.** (*L.* i. t. 8.) S. A var. marked with numerous red dots on the sep. and pet.

Phalænopsis sumatrana kimballiana. (*G. C.* 1888, iv. 6; *H. G.* 1888, 397.) S. A var. with broad bright yellow sep. and pet. barred with red, and a light ochraceous lip with an orange tubercle on each side lobe.

—— Var. **paucivittata.** (*G. C.* 1882, xvii. 628.) S A var. with a few brownish purple bars on the sep. and pet., and some fine mauve stripes upon the lip.

—— Var. **sanguinea.** (*G. C.* 1881, xv. 782.) S. A var. with the lateral sep. almost wholly dark red, with very few yellowish green markings.

Phalænopsis tetraspis. (*G. C.* 1881, xv. 562, 656; *B. M.* t. 7321.) S. In the way of *P. violacea*, with a rich panicle of white fl. Lateral lobes of lip ligulate, retuse, with a tooth at the upper end and a conical callus in the middle, between the lobes are two pairs of bristle-like processes; front lobe of lip rhomboid-ligulate, with a cushion of hairs at the apex. Andamans.

Phalænopsis Valentini. (*G. C.* 1883, xx. 262.) S. Purple sep. and pet., white inside at the base, and having some purple bands; lip much like that of *P. violacea*, mauve, white and yellow. A supposed natural hybrid between *P. violacea* and *P. Cornucervi*. Malaya.

Phalænopsis veitchiana brachyodon. (*G. C.* 1884, xxi. 270.) S. A distinct var. with white sep. and pet., the base of the lateral sep. with some brown spots; front lobe of the lip dark purple; side lobes with purple tips.

Phalænopsis Vesta. (*G. C.* 1894, xv. 343.) S. A garden hybrid between *P. rosea leucaspis* and *P. Aphrodite*. [*P. intermedia*, Lindl. var. *Vesta*.]

Phalænopsis violacea bowringiana. (*G. C.* 1884, xxii. 262.) S. A var. with pure light yellow fl. with purple marks at the base of the sep. and pet.

—— Var. **murtoniana.** (*G. C.* 1878, x. 224.) S. A var. with fine lemon-yellow fl. marked with purple inside at the base of the lateral sep., the middle part of the lip, and base of the column.

—— Var. **schrœderiana.** (*G. C.* 1882, xviii. 680; *Fl. and P.* 1882, 140 under name of *P. Schrœderi*.) S. A var. with larger and more brilliantly coloured fl. than the type.

Phalaris gigantea. (*R. H.* 1877, 440.) Gramineæ. H. herb, in the way of *P. arundinacea* (of which it is probably only a large form), but much stouter and larger, attaining a height of several yards.

Phaleria ambigua. (*B. M.* t. 7471.) Thymelæaceæ. S. A climbing glabrous shrub with light green somewhat leathery l. and axillary and subterminal heads of pure white scented *Daphne*-like fl. Java.

Pharbitis triloba. (*W. G.* 1890, 161.) Convolvulaceæ. S. [*Ipomæa hederacea*, Jacq.]

Phaseolus derasus. (*W. G.* 1888, 126.) Leguminosæ. S. climber, glabrous or nearly so. L. ovate, acuminate. Fl. greenish white in pedunculate few-flowered racemes. Seeds black, with a white hilum. Brazil.

Philadelphus Coulteri. (*G. and F.* 1888, 232, f. 40.) Saxifragaceæ. H. H. shr. with slender drooping branches,

ovate-lanceolate serrate l., white-pubescent beneath, and solitary white fl. about 1 in. in diam. Northern Mexico.

Philadelphus Lemoinei. (*W. G.* 1888, 124; *G. C.* 1897, xxi. 89, f.) H. Garden hybrid between *P. microphyllus* and *P. coronarius*.

Philadelphus microphyllus. (*G. and F.* 1888, 248; *G. C.* 1887, ii. 156, f. 36.) H. A twiggy shr. with slender stems 2–3 ft. high, broadly ovate hairy l., ½ in. long, shining green, pale beneath, and small white very fragrant fl. New Mexico.

Phillyrea decora. (*G. C.* 1888, iv. 672, f. 96.) Oleaceæ. H. shr. [The earliest name for *P. vilmoriniana*, Boiss.; *B. M.* t. 6800.]

Philodendron andreanum. (*R. H.* 1886, 36, t.) Araceæ. S. A fine Aroid of climbing habit. The pendulous l. are 2–3 ft. long, by 10 in. broad, elongate, cordate-lanceolate, acute, dark shining green, with coppery reflections. Colombia.

Philodendron Carderi. (*Bull Cat.* 1880, 6, t. 8; *Gfl.* 1881, 245, f.) S. [*P. verrucosum*, Mathieu.] Colombia.

Philodendron corsinianum. (*B. T. O.* 1888, 211.) S. Garden hybrid.

Philodendron devansayanum. (*Ill. H.* 1895, 187, 376, t. 48.) S. Stems scandent; l. cordate, glossy green when adult, blood-red when young; stems red. Upper Peru.

Philodendron elegans. (*Williams' Cat.* 1881, 36.) S. climbing per., with pinnatifid l.

Philodendron Glaziovii. (*B. M.* t. 6813.) S. Climber, in the way of *P. crassinervium*, with oblong acute deep-green l., 12–18 in. long, 3–5 in. broad, and solitary axillary open spathes of a pale yellowish colour, with the inside of the tube crimson. Brazil.

Philodendron gloriosum. (*Ill. H.* 1876, t. 262.) S. climber, with stem ¾–1 in. thick, dark green. L. on long dark green petioles, with a cordate acute blade, 16–20 in. long, dark green with pure white midrib and veins. Colombia.

Philodendron holtonianum. (*G. C.* 1876, vi. 365, f. 73.) S. Petiole 18–24 in. long, channelled down the face: blade 3-parted almost to the base, about 18 in. long, rather less in breadth: middle lobe acute, 1-nerved; lateral lobes obtuse, 3-nerved, shining green above, paler beneath. Colombia.

Philodendron Mamei. (*R. H.* 1883, 104, f. 21.) S. foliage plant with large cordate acute l. handsomely variegated with white. Ecuador.

Philodendron Martineti. (*Ill. H.* 1895, 223.) S. This closely resembles *P. Melinoni*.

Philodendron nobile. (*Bull Cat.* 1885, 15.) S. Like *P. crassinervium*, but larger: stem climbing: l. obovate-lanceolate, acute. Fl. axillary: tube of the spathe rosy-crimson inside and outside: the lamina white inside, spotted outside with deep rose. South America.

Philodendron notabile. (*G. C.* 1893, xiii. 414.) S. plant of large dimensions, with a short stem and long-stalked lobed l., the blades 2 ft. long and cordate, coloured deep green.

Philodendron robustum. (*Lind. Cat.* 1896, 21.) S. Described as a species of extraordinary vigour with large emerald green l.

Philodendron serpens. (*B. M.* t. 6375.) S. Climbing Aroid with large oblong-cordate bright green l. on long terete petioles which are covered with curved fleshy setæ. Spathe 5 in. long, pale flesh-coloured on the tube and pale greenish yellow on the upper part outside, inside with the tube crimson and the rest cream-coloured. Colombia.

Philodendron Sodiroi. (*R. H.* 1883, 508; *G. C.* 1883, xix. 510.) S. climber. Petioles depressed above, violet, dotted with white: lamina elongate, cordate-ovate, with a very obtuse sinus, short auricles, and a long-pointed apex, soft and twisted, bright green with large interrupted silvery spots. The nerves are scarcely prominent above, prominent and violaceous beneath. Colombia.

Philopodium rigidum. (*B. T. O.* 1888, 249.) H. H. [*Muehlenbeckia adpressa*, Meissn.]

Phlox adsurgens. (*G. and F.* 1888, 66, f. 11.) Polemoniaceæ. H. plant with opposite broadly ovate or ovate-lanceolate acute l., and lax few-flowered cymes of long-tubed rose-coloured fl. Oregon and North-west California.

Phlox Drummondii cuspidata. (*Gfl.* t. 1264.) H. annual. Corolla-lobes 3-toothed, the middle tooth 4–5 times as long as the side teeth. [Syn. *Phlox Drummondii*, Hook. f. var. *stellata*, Grilli, *B. T. O.* 1888, 119, f. 18.]

—— Var. **fimbriata.** (*Gfl.* t. 1264.) H. annual. Corolla-lobes 3-toothed, middle tooth about twice as long as the side teeth. [Syn. *Phlox Drummondii*, Hook. f. var. *laciniata*, Grilli, *B. T O.* 1888, 119, f. 19.]

—— Var. **flore pleno.** (*Gfl.* 1886, 404, f. 50.) H. A double-flowered form.

Phlox nana. (*G. and F.* 1888, 413, f. 66.) H.? per. of dwarf habit. 6–9 in. high, with spreading linear-attenuate l. 2–3 in. long, and lax corymbs of red, white or yellow fl., 1 in. in diam., with elliptic entire corolla-lobes. Texas.

Phœnix compacta. (*Bull Cat.* 1883, 15.) Palmæ. S. Garden hybrid between *P. reclinata* and *P. leonensis*.

Phœnix cycadifolia. (*Gfl.* t. 974.) S. This is probably a var. of the Date Palm, with the aspect of a Cycad; it has a cylindrical trunk over 2 ft. thick, covered with the numerous scars of the fallen l.; l. 5–6 ft. long, pinnate: pinnæ very numerous, linear.

Phœnix hybrida. (*Bull Cat.* 1883, 15.) S. Garden hybrid between *P. dactylifera* and *P. farinifera*.

Phœnix intermedia. (*Bull Cat.* 1883, 15.) S. Garden hybrid between *P. sylvestris* and *P. reclinata*.

Phœnix melanocarpa. (*G. C.* 1893, xiv. 299; *R. H.* 1893, 563, f.; 1894, 493, f.) S. A supposed large-fruited var. of *P. senegalensis*, said to have originated in a garden on the Riviera. It has black edible fruits.

Phœnix Rœbelenii. (*G. C.* 1889, vi. 473, f. 68; *G. and F.* 1890, 273, f.) S. Dwarf species. Its stem is about 2 in. in diam., and the l. are in a compact head, each one being about 1 ft. long, regularly pinnate; the pinnæ as narrow and green as those of *Cocos weddelliana*. Siam.

Phœnix rupicola. (*Bull Cat.* 1877, 7, t. 4; *G. C.* 1887, ii. 45, f. 4.) S. palm with wide-spreading arching pinnate l., having a slender rhachis and very short petiole; pinnæ long and narrow, channelled at the base, the lower ones gradually reduced to spines. India; China.

—— Var. **foliis argenteo-variegatis.** (*Ill. H.* 1887, t. 3.) S. A var. having the l. variegated with white. Garden variety.

Pholidota assamica. (*Gfl.* 1890, 607.) Orchidaceæ. S. epiphyte, similar to *P. imbricata*, but differing in its nearly globose pseudobulbs. Assam.

Pholidota Lugardi. (*K. B.* 1893, 6.) S. Allied to *P. articulata* but larger in all its parts. The racemes are 6 in. long, pendent, and clothed with small shell-like white fl. Western Burma.

Pholidota repens. (*K. B.* 1891, 199.) S. Rhizome creeping, jointed; l. 3–4 in. long, oblanceolate; racemes short, recurved; fl. small, flesh-pink. India.

Pholidota ventricosa. (*G. C.* 1889, v. 585.) S. An interesting species, with l. 1½ ft. long, and a fl.-spike 1 ft. high, bearing white *Convallaria*-like fl. Java.

Phormium alpinum, flaccidum, Hursthonsii, and **robustum.** (*W. G.* 1890, 448.) Liliaceæ. G. No descriptions beyond the statement that *P. Hursthonsii* has long panicles of purple fl.

Phormium Hookeri. (*B. M.* t. 6973; *G. and F.* 1888, i. 48; *R. H.* 1888, 479.) H. Resembling *P. Colensoi*, with flaccid ensiform l. fissured at the apex, of a pale green, without a coloured margin, and a tall panicle of slightly curved fl., with the outer segments yellow, and the inner greenish: filaments red. New Zealand.

Phrynium variegatum. (*Ill. H.* 1886, t. 606.) Scitamineæ. S. per. about 1 ft. high, with erect whitish petioles, striate with green, and oblong acute l. 5–7 in. long, white, irregularly banded with green. [*Maranta arundinacea*, Linn. var. *variegata*.]

Phyllagathis gymnantha. (*Bull Cat.* 1884, 14.) Melastomaceæ. S. per. with cordate-ovate ciliate 7-nerved glossy green l. and pedunculate heads of green fl. Borneo.

Phyllagathis hirsuta. (*Ill. H.* 1894, t. 3.) S. An almost stemless plant with large round green l. like the other three species of the genus, but differing from them in the very short broadly rounded lobes of the calyx, in the obovate rounded pet., and in the ovary being almost entirely adherent to the calyx. Borneo.

Phyllanthus atropurpureus. (*Bull Cat.* 1876, 11.) Euphorbiaceæ. S. Deciduous shrub with purplish stems furnished with bluntly ovate rich dark purple l., which are dark green when young. Comoro Island.

Phyllanthus Chantrieri. (*R. H.* 1883, 537, ff. 106–7.) S. shr. Appears to be the same as the well-known *P. glaucescens.*

Phyllanthus roseo-pictus. (*Veitch. Cat.* 1877, 24.) S. L. alternate, about 1 in. long, elliptic, obtuse, variegated with crimson and white.

Phyllanthus salviæfolius. (*R. H.* 1883, 175, f. 34–6; *G. C.* 1883, xix. 693.) G. Shr. with very spreading branches and close-set distichous subsessile ovate-oblong l. pubescent above, tomentose below; male fl. on long filiform pedicels, small, greenish; female fl. on short pedicels, larger, tinted with red. Colombia.

Phyllanthus seemannianus. (*Bull Cat.* 1879, 7.) S. Erect shrub, with long leaf-like branches, which bear shortly stalked alternate l., from the axils of which the curious inconspicuous fl. are produced. New Hebrides.

Phyllocactus albus superbissimus. (*Gfl.* 1891, 258.) Cactaceæ. G. A garden seedling with large yellowish white fl.

Phyllocactus crenato-grandiflorus. (*Gfl.* t. 1176.) G. plant with large yellowish white fl. Known in gardens as *P. Cooperi.*

Phyllocactus cruentus Ackermanni. (*F. M.* t. 413, under *Epiphyllum.*) G. A garden seedling with large brilliant scarlet fl. flushed with violet-purple.

Phyllocactus Franzii. (*Gfl.* t. 1370, f. 1.) G. A garden seedling.

Phyllocactus Hildmanni. (*Gfl.* t. 1421.) G. A garden hybrid between *P. Wrayi* and *P. crenatus.*

Phyllocactus Pommer-Eschei. (*Gfl.* t. 1370, f. 2.) S. A garden hybrid between *P. Wrayi* and *P. crenatus.*

Phyllocalyx edulis. (*R. H.* 1884, 348, t.; *Fl. and P.* 1884, 138.) Myrtaceæ. G. shr. with the young parts covered with a rusty tomentum. L. shortly petioled, elliptic-oblong, acute, shining green. Fl. axillary, solitary. Fruit as large as a walnut strongly ribbed, yellow. Brazil. [*Eugenia Selloi*, Berg.]

Phyllostachys nigra punctata. (*G. C.* 1894, xv. 431.) Gramineæ. H. A var. with mottled stems. [Syn. *Bambusa nigro-punctata*, Hort.] Japan.

Phyllotænium Lindeni magnificum. (*Cat. Comp. Cont. d'Hort.* 1885, 8.) Araceæ. S. L. much larger than in the type. [*Xanthosma Lindeni*, T. Moore, var.]

Physalis Francheti. (*G. M.* 1894, f. 5329; *G. C.* 1894, xvi. 434, 441, f. 57.) Solanaceæ. H. Closely resembling *P. Alkekengi*, but with much larger fr. Japan.

Physalis violacea. (*R. H.* 1882, 216, t.) H. annual, with cordate acute l., yellow fl. with a dark purple spot at the base of each lobe, and large globose dark violet fr.

Physosiphon guatemalensis. (*K. B.* 1891, 197.) Orchidaceæ. G. A small species allied to *P. Loddigesii* with oblong l. and a raceme of small yellow and purple fl. Guatemala.

Physosiphon Lindleyi. (*K. B.* 1893, 61.) G. Near *P. Loddigesii.* Stem 2 in. long; l. oblong, obtuse, 3 in. long; scape 4 in. long, fl. ¾ in. long, green, with red sep. Mexico.

Physurus chinensis. (*K. B.* 1896, 200.) Orchidaceæ. S. Stem short; l. caespitose, ovate, green, 4 in. long; scapes short, bearing numerous small fl. Kwantung, China.

Phytarrhiza anceps. (*B. H.* 1879, t. 20–1.) Bromeliaceæ. S. [*Tillandsia anceps*, Lodd.]

Phytarrhiza crocata. (*B. H.* 1880, 87.) S. per. A small species with undulate branched stem, long distichous linear-subulate l. covered with silky white hairs, and an elongated slender villose nearly naked scape bearing a short elliptic distichous spike of about 5 saffron-yellow fl. [*Tillandsia crocata*, Baker.] Brazil.

Phytarrhiza Lindeni koutsinskyana. (*B. H.* 1880, 80.) S. A var. with double fl. [*Tillandsia Lindeni*, Regel, var. *koutsinskyana*, Year-book, 1881, 177.]

Phytarrhiza monadelpha. (*B. H.* 1882, 168, t. 7.) S. L. numerous, recurving, linear, attenuate, purplish; fl. in a lax distichous spike, whitish; calyx green. [*Tillandsia monadelpha*, Baker.]

Phyteuma comosum. (*B. M.* t. 6478; *G. C.* 1880, xiv. 176–7, f. 38–9.) Campanulaceæ. H. An interesting rock plant of tufted habit, about 2–3 in. high, quite glabrous. L. lanceolate, acute, toothed. Fl. in terminal heads. Corolla purple, flask-shaped, the inflated portion with 5 slits. Austrian Alps.

Phytolacca decandra albo-variegata. (*R. H.* 1887, 16, f. 2.) Phytolaccaceæ. H. per. L. variegated.

—— Var. **luteola.** (*R. H.* 1894, 471.) H. A form only differing from the type in having the l. a pale yellow, striped and spotted with bright green.

Picea alpestris. (*Gn.* 1887, 346.) Coniferæ. H. tree. Much in the way of *P. excelsa*, but having the young shoots velvety with stiffer shorter and thicker l. about ½–¾ in. long, and more distinctly 4-angled. Swiss Alps.

Picea breweriana. (*G. C.* 1886, xxv. 497–8, f. 93; *G. and F.* 1890, 67, f.) H. tree growing to 90 ft. high, somewhat resembling *P. excelsa*, with long drooping whip-like puberulous branchlets 6–8 ft. long; l. 5–12 lines long, ½–1 line broad, rounded or slightly carinate above, obtuse. Cones slender, 3 in. long, with thin entire scales. North California.

Picea excelsa capitata. (*R. H.* 1889, 393, f. 103.) H. A singular var. of the Spruce which forms a globular mass, from which project, like pins from a pin-cushion, relatively long branches, each bearing a head-like mass of leaves at the top.

Picea excelsa reflexa. (*R. H.* 1890, 259, f. 73; *Gn.* 1890, 538.) H. A form with pendulous branches.

—— Var. **virgata.** (*Gn.* 1887, 521, f. 128.) H. tree. [*P. excelsa*, Link, var. *monstrosa*, Loud.]

Picea Omorika. (*G. C.* 1884, xxi. 308, f. 56, 58.) H. A tall and distinct Spruce with ovoid double-brown buds clothed with ovate-lanceolate scales, flattish straight or curved linear-oblong obtuse l. ½–¾ in. long, shining green beneath, the upper side with a prominent midrib, and small Larch-like cones, 1–1¾ in. long and ¾ in. thick. Servia.

Picea orientalis nana. (*R. H.* 1891, 120.) H. A form of pyramidal habit depressed and enlarged at the base.

Picea parryana. (*Gn.* 1886, 199.) H. [*P. pungens*, Engelm.]

Picea pungens argentea. (*H. G.* 1888, 70.) H. [Syn. *P. parryana*, var. *glauca*, Hort.]

Pieris japonica. (*G. C.* 1882, xvii. 796–7, f. 120.) Ericaceæ. H. [Syn. *Andromeda japonica*, Thunb.]

Pieris ovalifolia densiflora. (*Bull Cat.* 1880, 6.) G. An evergreen shr. with slightly scabrous acuminate l. of a firm texture. Fl. in terminal racemes, white. Assam.

Pilea spruceana. (*G. C.* 1895, xviii. 388.) Urticaceæ. S. A dwarf plant with ovate rugose dark bronzy-green l.: fl. greenish white, in crowded axillary racemes. Peru and Venezuela.

Pilocereus Bruennowii. (*H. G.* 1888, 85, f.) Cactaceæ. G. succulent with columnar 9–12-angled stems; something in the way of *P. fossulatus* but with stronger and longer spines and stouter and longer hairs. [*Cereus.*] Bolivia.

Pilocereus Columna-Trajani. (*R. H.* 1890, 130, f. 40.) [*Cereus Columna-Trajani*, Karw.]

Pilocereus Hoppenstedti. (*H. G.* 1888, 8. f.) G. or S. succulent with columnar 18–20-angled stems, the angles rounded, with deep acute grooves between them. Pulvini close-set, white, tomentose: outer spines about 20, unequal in length, the lower ones longest, grayish white; central spines 6–8, brownish, stout at the base, the lower ones as much as 2½ in. long. [*Cereus.*] Mexico.

Pilogyne punctata. (*W. G.* 1889, 459, f. 73.) Cucurbitaceæ. G. [*Melothria punctata*, Cogn.]

Pilumna nobilis. (*L.* ii. t. 59; *W. O.* 4. t. 128.) Orchidaceæ. G. [*Trichopilia fragrans*, Lindl., var. *nobilis.*]

Pinanga decora. (*Cat. Comp. Cont. d'Hort.* 1886, 8.) Palmæ. S. Palm with two-parted l. of a dark red colour, passing insensibly into a transparent glaucous green, clouded as in some Dracænas.

Pinanga lepida. (*Bull Cat.* 1888, 9; *L'Hort. Int. Cat.* 1888–9, 52.) S. Palm with short rufescent petioles and the blade pinnately divided into unequal segments. Young l. brownish red, changing to deep green, faintly mottled with darker green.

Pinanga patula. (*B. M.* t. 6581.) S. Palm of dwarf habit with smooth ringed stem swollen at the base. L. unequally pinnate, 4–5 ft. long, oblong in outline. Spadix from below the l., branched, green when in fl., red when in fr. Drupes ellipsoid, ⅔ in. long, orange-yellow. Sumatra.

Pinanga sanderiana. (*Bull Cat.* 1885, 15.) S. Palm with 2-lobed spreading l. of a bright glossy mottled green: petioles without spines, mottled or freckled with a brownish pubescence. Indian Archipelago.

Pinanga spectabilis. (*Bull Cat.* 1886, 9.) S. Palm with dark green l. mottled with light green, silvery beneath. The young l. are two-lobed, the older ones pinnate.

Pinanga Veitchii. (*Veitch Cat.* 1880, 23, t. 16.) S. Variegated Palm of dwarf habit, whose general appearance reminds one of *Maranta Veitchii*. The fronds in an early stage are pale green, blotched and stained with spots of a deeper shade. The colour deepens with age, the spots become blackish, the midrib and veins take a reddish tinge and have a bronzy appearance. The under sides are dull crimson. Borneo.

Pinguicula bakeriana. (*G. C.* 1881, xv. 541, f. 102). Lentibulariaceæ. G. [*P. caudata*, Schlecht.]

Pinguicula caudata. (*B. M.* t. 6624; *Fl. and P.* 1882, 90.) G. A handsome plant, with a rosette of large elliptic l. and long-peduncled bright carmine fl. 1½ in. in diam. and with a slender spur of about the same length. Mexico.

Pinguicula hirtiflora. (*B. M.* t. 6785.) H. This much resembles *P. vulgaris* but the peduncles and calyx are hairy, the colour of the fl. paler; throat yellowish, sparsely glandular or glabrous: spur slender, straight or incurved. Mountains of Italy and Greece.

Pinguicula lutea. (*G. C.* 1891, ix. 729; *B. M.* t. 7203.) G. First introduced in 1816, but long since lost until its reappearance in cultivation was recorded in the works cited. It is similar to *P. vulgaris*, but has sulphur-yellow fl., the segments nearly regular. Southern United States.

Pinus austriaca, foliis aureis. (*Gfl.* 1887, 643.) H. tree. Garden variety.

Pinus Grenvilleæ. (*G. C.* 1881, xv. 112, f. 22.) G. A fine tree, growing 60–80 feet high. L. in fives, 12–14 in. long. Cones solitary, pendulous, narrow, conical, about 15 in. long. Colima, Mexico.

Pinus karamana. (*G. C.* 1884, xxi. 480–1, f. 91.) [*P. Laricio*, Poir. var. *pallasiana*, Lamb.]

Pinus koraiensis variegata. (*R. H.* 1887, 83.) H. Garden variety.

Pinus latifolia. (*G. and F.* 1889, 496, f. 135.) H. tree. A species with very long l. and persistent sheaths. Santa Rita Mountains, Arizona.

Pinus patula macrocarpa. (*G. C.* 1891, ix. 435, f. 92.) H. A form with cones much larger than those of the type. "Pinus del Doctor." Mexico.

Pinus ponderosa Scopulorum. (*H. G.* 1888, 559.) H. tree. A var. with shorter l. and smaller cones. Rocky Mountains.

Pinus sylvestris columnaris compacta. (*R. H.* 1889, 393, f. 102.) H. A slow-growing dense form, with flame-like outline like *P. Cembra* in a young state.

Pinus Strobus excelsa zebrina. (*R. H.* 1889, 393, f. 101.) H. A form of the Weymouth Pine, with l. marked with narrow white transverse bands.

Piper borneense. (*G. C.* 1882, xvii. 108.) Piperaceæ. S. A dwarf herb with a thick hairy stem and large l. of a rich dark green with broad but faint silvery-grey stripes between the nerves; they are 11-nerved, rugose and glabrous above, hairy-pubescent beneath. Borneo.

Piper metallicum. (*Lind. Cat.* 1882, 6.) S. L. thick, rounded. of a beautiful metallic green. Borneo.

Piper ornatum. (*Veitch Cat.* 1884. 13: *G. C.* 1884, xxii. 424.) S. foliage plant of climbing habit. L. peltate, ovate-orbicular, shortly-pointed, 2½-5 in. long, 2-4 in. broad, bright green marked with pink spots. Celebes.

Piper porphyrophyllum. (*G. C.* 1884, xxii. 438.) S. foliage plant. This is the correct name of the plant cultivated as *Cissus porphyrophyllus*. Penang.

Piper rubronodosum. (*Bull Cat.* 1877, 3.) S. shr. with fleshy scabrous stems red at the nodes. Petiole pubescent. L. cordate-ovate, bullate, deep sap-green, frosted over when young with silver-grey. Colombia.

Piper rubrovenosum. (*Ill. H.* 1887. t. 33; *H. G.* 1888, 124.) S. climber, with cordate acuminate bright green l., mottled above with rose along the course of the veins, green beneath. This seems scarcely to differ from *Piper ornatum*.

Piptanthus tomentosus. (*R. H.* 1887, 474.) Leguminosæ. H. H. shr. somewhat resembling *P. nepalensis*, but clothed with a silky tomentum in all parts. Yunnan, China.

Piptospatha insignis. (*G. C.* 1879, xi. 138, f. 20; *B. M.* t. 6598.) Araceæ. S. A dwarf and tufted Aroid. L. lanceolate, narrowed to an acute base and apex, 3½-5½ in. long, coriaceous, dark green above. Scapes rather shorter than l.; infl. nodding. Spathe convolute, fusiform, not opening, white with a rosy apex, ultimately falling off like a cap; spadix shorter than the spathe, basal half female, the rest male: ovaries crowded, oblong, truncate, one-celled with 2–3 parietal placentas; anthers crowded, sessile, connective twice as long as anther cells, produced in a conical point. North Borneo.

Piptospatha Ridleyi. (*B. M.* t. 7410.) S. differing from *P. insignis* by its larger l. mottled with yellow, and the peduncle, which is 6 in. long, bearing a nodding spathe 2 in. long, green with pink lines and dots; spadix shorter than the spathe, in which it is completely hidden. Malay Peninsula.

Pitcairnia alta. (*B. M.* t. 6606.) Bromeliaceæ. S. A fine species, with linear l. 2–3 ft. long, green above, white beneath. Fl.-stem 5–6 ft. high, panicled above. Fl. bright red. West Indies.

Pitcairnia corcovadensis. (*Gfl.* 1884. 26.) S. A slender species with erect glabrous broadly linear acuminate l. 3–4 ft. long passing into linear bracts on the fl.-stem, which is about 1 ft. high, and terminates in a single lax raceme of red fl. Brazil.

Pitcairnia darblayana. (*Jard.* 1888, 201: *W. G.* 1888, 383.) S. Garden hybrid.

Pitcairnia flavescens. (*B. M.* t. 6318.) S. per. of robust habit. L. linear 2–3 ft. long, 1-1¼ in. broad, bright green above, mealy white beneath. Scape 1½ ft. long, slightly floccose; raceme lax, about 1 ft. long. Fl. 2 in. long; calyx bright yellow; pet. primrose-yellow. [*P. xanthocalyx*, Mart.] Tropical America.

Pitcairnia jaliscana. (*G. and F.* 1888, 195.) S. An attractive species but perhaps not in cultivation. Base bulb-like, composed of very short broadly sheathing l. armed with reflexed spines on the margins. L. linear, erect, unarmed, mealy beneath. Fl.-stem glabrous, bracteate. Fl. numerous, pedicellate: bracts and calyx deep rose-coloured; corolla nearly 2 in. long, scarlet. Mexico.

Pitcairnia Maroni. (*R. H.* 1884, 222; 1885, 108. t.) S. A garden hybrid between *P. Alstenteini* and *P. corallina*.

Pitcairnia Palmeri. (*G. and F.* 1888, 209, 211, f. 38.) S. A small species with a bulbous base formed

of broad leaf-sheaths, and a few filiform or linear l., those on the barren shoots sparsely hairy, those on the flowering shoot barbed. Fl. stem with slender subulate entire l. Fl. in a lax raceme, bracts narrow, half as long as the recurved pedicels. Corolla 1¼ in. long, light red. Mexico.

Pitcairnia platyphylla. (*Bull Cat.* 1876, 11.) S. L. erectly spreading, parchment-like, bright green above, white beneath. Fl. somewhat panicled, large, deep crimson. West Indies.

Pitcairnia Roezli. (*B. H.* 1888, 285, t. 18–9; *B. M.* t. 7175.) S. L. in lax tufts, broadly linear, acuminate, about 2 ft. long, with smooth edges, and very mealy beneath: fl.-stem about as long as the l., bright red, having green bracts with a cobwebby tomentum. The fl. are about 2½ in. long and of a bright scarlet-red colour, arranged in a dense raceme. South America.

Pitcairnia violacea. (*R. H.* 1880, 270.) S. A fine species with long narrow recurving glaucous spine-margined l. Fl.-stem 6 ft. high, with a large lax branching infl.: the branches 6–14 in. long, spreading horizontally. Fl. 2 in. long, deep violet. Anthers yellow. The plant is in flower for about a month. Mexico?

Pithecoctenium buccinatorium. (*B. T. O.* 1888, 272, t. 11.) Bignoniaceæ. S. climber figured by Lindley (*Botanical Register*, t. 1301) as *Bignonia Cherere*, but distinct from the species of Aublet. [*Bignonia buccinatoria*, Mairet.] Mexico.

Pithecoctenium clematideum. (*B. T. O.* 1890, 22, t. 2.) S. climber with slender stems; l. ending in a tendril, with two ovate acuminate leaflets, or sometimes with three leaflets and no tendril. Fl. showy, trumpet-shaped, white, with a yellow throat, in large terminal racemes. [Syn. *Anemopægma clematideum*, Griseb.] Argentina.

Pittosporum eriocarpum. (*B. M.* t. 7473.) Pittosporaceæ. G. A small tree with shortly stalked l. and terminal panicles of fragrant golden-yellow fl. Western Himalaya.

Pittosporum eugenioides variegatum. (*Bull Cat.* 1882, 17.) G. evergreen shr. with elliptic-oblong pale green l. bordered with white. New Zealand.

Pittosporum phillyræoides. (*B. H.* 1888, 328, t. 13.) G. A graceful shr. with slender drooping branches, linear l., 2–3 in. long, and axillary yellow fl. about ⅓ in. in diam. Australia.

Pittosporum rhytidocarpum. (*G. H.* 1887, 130.) G. shr. with obovate or oblanceolate shortly acuminate l., and terminal crowded umbels of white fl. Fiji.

Plagiolirion Horsmanni. (*G. C.* 1883, xx. 38, 105, f. 16.) Amaryllidaceæ. S. Resembling an *Eucharis* with a long-necked bulb having two elliptic acute l., and a scapose few-flowered umbel of small white fl. Perianth irregular, one segment being directed downwards, the other five ascending. Colombia.

Plantago lanceolata marginata. (*R. H.* 1889, 71.) Plantaginaceæ. H. per. A form with the l. bordered with white, and marked with glaucous stripes, and having the fl.-stem crowned with a tuft of oblong-lanceolate l., spotted with white. It is an abnormal form, and may be increased by division. France.

Plantago macrophylla purpurea. (*R. H.* 1878, 179.) H. A large purple-leaved var. of *P. major*.

Platanus occidentalis cucullata. (*R. H.* 1877, 354.) Platanaceæ. H. A curious var.; l. small, roundish, nearly entire or slightly lobulate, somewhat cucullate.

Platanus occidentalis, foliis argenteis. (*R. H.* 1887, 64.) H.

Platycarya strobilacea. (*R. H.* 1888, 88, f. 18 9.) Juglandaceæ. H. H. shr. An older name for *Fortunea chinensis*, Lindl.

Platycerium Hillii. (*G. C.* 1878, x. 429, f. 74–5.) Filices. S. With the general habit of *P. alcicorne*, but the mature fronds of a decided green colour (not greyish), very thinly covered with white stellate hairs, flabellately branched in the upper third only; fronds about 1½ ft. long, the part just below the branching about 8 in. broad and gradually tapering downwards into a short stipes; sori forming small roundish or oblong spots at the base of the ultimate lobes, or about an equal distance from the apex if there is no side lobe. Queensland.

Platycerium Veitchii. (*G. C.* 1896, xix. 652.) S. Of stout erect growth, each frond being of unusually leathery substance and dark green in colour.

Plectocomia crinita. (*Lind. Cat.* 1896, 21.) Palmæ. S. Petioles armed with white spines in fascicles of about seven; l. pinnate, very large, glaucous green, whitish on the under side.

Plectocomia himalayana. (*Bull Cat.* 1878, 8.) S. Distinct and graceful, with ample foliage. L. pinnate; pinnæ linear-lanceolate, acuminate. Spadix branched. Sikkim Himalaya.

Plectranthus cylindraceus. (*W. G.* 1894, 2.) Labiatæ. G. A somewhat succulent under-shrub with small roundish l. and lilac fl. Abyssinia.

Plectranthus fœtidus. (*Bull Cat.* 1877, 7; *B. M.* t. 6792.) G. Robust species. 3–5 ft. high with large cordate crenate l. tomentose on both sides, and a terminal panicle of long slender spikes of bright blue fl. enveloped in white wool. Eastern Australia.

Plectranthus hadiensis. (*W. G.* 1894, 2.) G. A prostrate bush, much branched, with shortly-stalked doubly-serrated heart-shaped l. and lilac-purple spotted fl. Abyssinia.

Plectranthus herbaceus. (*W. G.* 1894, 2.) G. An erect herb with white-haired long-stalked heart-shaped toothed l. and lilac fl. Abyssinia.

Plectranthus marrubioides. (*G. C.* 1894. xvi. 34.) G. A curious plant, with dense clusters of very small white fl. forming long spikes; l. small obovate-cuneate, sessile, fleshy. Abyssinia.

Plectranthus Schweinfurthi. (*W. G.* 1894, 1.) G. A dense dwarf bush with stalked ovate toothed l. and dense many-flowered whorls of small blue fl. Arabia.

Pleione arthuriana. (*Veitch Cat.* 1881, 17.) G. Orchidaceæ. [*Cœlogyne arthuriana*, Reichb. f.]

Pleione humilis tricolor. (*W. O. A.* t. 102.) G. [*Cœlogyne humilis*, Lindl. var.]

Pleopeltis fossa. (*G. C.* 1882. xviii. 586; *Fl. and P.* 1882, 123, 181.) Filices. S. evergreen fern with coriaceous arching crowded fronds 1 ft. long, varying from linear-lanceolate to ovate in outline, sinuate-dentate or lobed; the lobes simple, bifid, or multifidly flabellate; sori large, roundish, sunk in cavities, in single rank on each side of the midrib. [*Polypodium fossum*, Baker.] Malay Archipelago.

Pleopeltis picta. (*G. C.* 1881, xv. 331; *Williams' Cat.* 1881, 36.) S. fern of free growth allied to *P. Billardieri*, with a creeping rhizome clothed with black scales. Fronds 3-lobed, glabrous, tapering at the base into the smooth stipes; the lobes oblong, rounded at the apex, the middle one about 5 in. long, 1 in. broad. [*Polypodium pictum*, Baker.] Polynesia.

Pleopeltis Xiphias. (*G. C.* 1881, xv. 331.) S. Rhizome creeping, clothed with brownish scales. Fronds simple, elliptic-oblong or somewhat obovate, suddenly narrowed into a longish tail-like cusp. [*Polypodium Xiphias*, T. Moore.] Polynesia.

Plerandra Græffei. (*Gfl.* 1887, 71.) Araliaceæ. S. No doubt a misprint for *P. Graeji*. A small robust tree, with dark green digitate l. having 8–10 leaflets. Fiji.

Pleroma gayanum. (*B. M.* t. 6345.) Melastomaceæ. S. dwarf shr. Branches 4-angled. L. opposite, shortly petiolate, ovate or elliptic, acute, serrate, 5–7-nerved, 3–4 in. long, deep rich green, covered with short appressed hairs. Fl. in terminal panicles, 1 in. in diam., white tinged with yellow in the centre. [*Tibouchina.*] Peru.

Pleroma marmoratum. (*Bull Cat.* 1884, 14.) S. A bushy shr. with ovate dark green l. blotched with cream-colour, and large bluish purple fl.

Pleuropetalum costaricense. (*B. M.* t. 6674; *Fl. and P.* 1883, 42.) Amarantaceæ. S. Half-shrubby plant. L. broadly lanceolate, acuminate. Fl. small, disposed in terminal close panicles, which spread in fruit; berries the size of a pea, bright crimson. Costa Rica.

Pleurothallis autraniana. (*O. R.* 1895, 264.) Orchidaceæ. G. Allied to *P. longissima*. Fl. in racemes, light yellow, spotted and striped with purple-brown.

Pleurothallis barberiana. (*G. C.* 1881. xvi. 6 : *B. M.* t. 6886.) G. L. very small, elliptic, acute, thick, keeled beneath. Peduncle 4–5 times as long as the l., very slender, few-flowered. Sep. lanceolate, aristate, free, ciliate, light ochre, blotched with dark purple. Pet. smaller, serrate, whitish ; lip cuneate oblong-clavate. South America.

Pleurothallis inflata. (*K. B.* 1894, 154.) G. With stems 6 in. long, l. 6 in. long, 1 in. wide, and solitary whitish fl. Colombia.

Pleurothallis insignis. (*G. C.* 1887, i. 477 ; *B. M.* t. 6936.) G. A striking species with oblong leathery l. 3–3½ in. long, 1 in. broad ; peduncles 2-flowered, 2½ in. long ; fl. 2½ in. long, of a whitish pellucid green, striped with dull purple, lip dark blackish purple, villous at the apex. Venezuela ?

Pleurothallis Krænzlini. (*G. C.* 1894, xvi. 103.) G. A singular little species, with pretty purple and silver-white fl.

Pleurothallis liparanges. (*G. C.* 1885, xxiii. 532.) G. A small species with oblong bluntish l. spotted with mauve-purple above, and mauve with a few green blotches beneath : raceme few-flowered ; fl. thin, pellucid, light reddish ochre. Brazil.

Pleurothallis maculata. (*K. B.* 1893, 334.) S. Allied to *P. recurva* ; l. 2 in. long, blotched with dull purple ; fl. small, white and purple. Brazil.

Pleurothallis parva. (*K. B.* 1895, 33.) S. A small species with yellow fl. Brazil.

Pleurothallis pergracilis. (*K. B.* 1893, 334.) S. Allied to *P. marginata*. It has small spathulate l. in a dense tuft, and scapes 4 in. high, bearing very small yellowish fl. with purple lines. British Honduras.

Pleurothallis pernambucensis. (*K. B.* 1894, 361.) G. Allied to *P. testæfolia*, l. oblong, 1 in. long, fleshy ; raceme ½ in. long, bearing six small green and purple fl. Brazil.

Pleurothallis picta. (*G. C.* 1887, ii. 431.) G. A pretty little species, with a dense tuft of l. about 2 in. high, and racemes of small bright yellow and red fl. Demerara.

Pleurothallis platystachys. (*Gfl.* 1888, 459.) G. Tufted. L. leathery, lanceolate, 2-toothed at the apex. Scape as long as the l. with about 4 keeled imbricated dull green bracts, and a compressed spike of small green fl. dotted with purple. Brazil.

Pleurothallis puberula. (*K. B.* 1893, 169.) G. Allied to *P. univaginata*, but the fl. are smaller and more numerous ; they are coloured green and dull-yellow, and are fragrant.

Pleurothallis punctulata. (*G. C.* 1888, iv. 756.) G. Rather a pretty species. L. 3½ in. long, 1 in. broad, lanceolate-oblong, subacute, fleshy, glaucous below, on stems about 2 in. high. Peduncle 2½ in. long. Fl. 1 in. long, light yellow, spotted with purple brown. Upper sep. lanceolate-oblong, acute ; side sep. united into a concave oblong body, bifid at the apex. Colombia.

Pleurothallis pyrsodes. (*G. C.* 1876, vi. 386.) G. Much in the way of *P. fulgens*, with numerous very short-stalked stout l. and a single orange-coloured fl. Central America.

Pleurothallis regeliana. (*Gfl.* 1886, 51.) G. Allied to *P. recurva*, with a climbing branched stem, coriaceous oblong l. rounded at the base, and a recurved several-flowered raceme of slightly tomentose fl. Upper sep. ochraceous : connate sep. reddish : pet. whitish ; lip rose, with a purple cushion at the base. Minas Geraes.

Pleurothallis rhombipetala. (*K. B.* 1893, 4.) G. Allied to *P. arcuata*, with lax racemes of small green and purple fl. Mt. Roraima, British Guiana.

Pleurothallis Roezli. (*O.* 1888, 80, t. ; *W. O. A.* t. 476.) G. An attractive species with large purple-brown fl. L. 3–5 in. long, 1–1¼ in. broad, oblong-lanceolate, 2-toothed at the apex. Peduncle rather longer than the l., the flower-bearing part drooping. Fl. 5–6 in a one-sided raceme, about 1 in. long, the upper sep. nearly parallel with the lower sep., which are united to their apex, so that the fl. is open but a little way. Colombia.

Pleurothallis rotundifolia. (*K. B.* 1895, 191.) G. A small species with orbicular l. ½ in. long, and short scapes of yellow and purple fl. Jamaica.

Pleurothallis spectrilinguis. (*G. C.* 1883, xviii. 457.) G. A small species,

with narrow spathulate l. about 1 in. long, and subcorymbose racemes of hyaline fl. spotted on the aristate sep. with purple-mauve; lip dark olive-brown, with basilar retrorse horns and an elliptic fringed blade.

Pleurothallis teretifolia. (*G. C.* 1892, xii. 521.) G. Allied to *P. teres*, with narrow terete l. forming a tuft 9 in. high, and slender pendulous racemes of fleshy brown fl. Brazil.

Pleurothallis tribuloides. (*G. C.* 1887, ii. 335.) G. An inconspicuous species about 2 in. high, with numerous, very small brick-red fl. West Indies.

Pleurothallis unistriata. (*K. B.* 1893, 334.) G. Near *P. marginata*. L. only about 1 in. long; scape 2½ in. long, slender, bearing a few small whitish fl. with purple lines.

Plumbago capensis alba. (*Williams' Cat.* 1886, 26.) Plumbaginaceæ. G. A var. with white fl.

Podachænium andinum. (*R. H.* 1892, 414. f. 125–6.) Compositæ. S. L. large, coarsely lobed; corymbs of fl.-heads lax; ray-florets white: disk yellow. Colombia.

Podocarpus pectinata. (*G. C.* 1892, xi. 113, 563, 662; *K. B.* 1892, 105.) Taxaceæ. G. A species with silvery foliage. New Caledonia.

Podocarpus vitiensis. (*G. C.* 1886, xxv. 464, f. 89.) G. shrub or tree, with drooping frond-like branches thickly beset with small distichous ovate-lanceolate acute bright green l. Fiji.

Podochilus longicalcaratus. (*K. B.* 1894, 186.) Orchidaceæ. S. Allied to *P. uncifer*us. Stem 2 ft. long; l. 1 in. long, ½ in. wide; raceme 1 in. long: fl. small, white and purple. Borneo.

Podocytisus caramanicus. (*R. H.* 1887, 63.) Leguminosæ. H. shr., having the general aspect of *Cytisus purpureus*. L. petiolate, digitately trifoliate: the leaflets obovate, ¼–¾ in. long. Fl. bright yellow, about ½ in. in expanse, disposed in terminal paniculate racemes. [*Laburnum caramanicum*, Benth. & Hook. f.] Greece.

Podolasia stipitata. (*G. C.* 1882, xviii. 70; *Fl. and P.* 1882, 123.) Araceæ. S. per. of striking appearance. L. sagittate or hastate, with narrow acuminate lobes; petioles long and prickly. Peduncle about 1 ft. long, smooth or prickly. Spathe boat-shaped, open to the base, brownish red, 3¼–4 in. long. Spadix stipitate, cream-coloured, changing to brown. Borneo.

Podophyllum pleianthum. (*G. C.* 1889, vi. 299, f. 44; *B. M.* t. 7098.) Berberidaceæ. Probably hardy perennial. Petioles 1–2 ft. high, the fruiting ones forked, from the base of which are produced the large bunches of drooping rich purple fl., followed by fr. resembling the May Apple, *P. peltatum*, glaucous green, purple when ripe; l. peltate, orbicular, 6–8-lobed; the lobes triangular, acuminate, very shallow; margins dentate. China.

Pogogyne nudiuscula. (*Gn.* t. 1242; *G. C.* 1887, i. 447.) Labiatæ. H. A pretty annual 9–12 in. high, with slender puberulent branches, narrow obtuse glabrous l., and whorls of bright blue fl. about ½ in. long. California.

Pogonia barklyana. (*G. C.* 1885, xxiii. 726.) Orchidaceæ. S. A fine species with the peduncle nearly 2 ft. in length. Fl. green, with a darker green flush, and a fine network of veins on the middle lobe of the lip. Sep. lanceolate, acuminate: pet. broader and shorter; lip trifid, with angular side lobes and an acuminate middle lobe reflexed at the apex. L. large, roundish, cordate at base. Mauritius and ? Comoro Islands.

Pogonia gammieana. (*B. M.* t. 6671.) S. An interesting terrestrial orchid with a solitary cordate plicate l., and a lax raceme of pale lilac fl., appearing after the l. has died down. North India.

Pogonia pulchella. (*B. M.* t. 6851.) G. Tuber sub-globose. L. solitary, close to the ground, roundish, cordate, acute, of a fine bronzy green, purple beneath, hairy on both sides. Fl.-stem produced after the l., two-flowered. Sep. and pet. ¾ in. long, narrow-lanceolate, acute, dull yellow ochre, with three darker nerves; lip rose, with darker lines. [*P. Fordii*, Hance.] Hong Kong.

Pogonia speciosa. (*O. R.* 1894, 325.) S. Stem erect, 4 ft. high with alternate ovate oblong glaucous l. and 2–3 large purple apical fl. not unlike those of a *Bletia*. Brazil.

Poinsettia ignescens. (*Williams' Cat.* 1882, 28.) Euphorbiaceæ. G. Colour var. of *P. pulcherrima.* [*Euphorbia pulcherrima*, Willd.]

Poinsettia mirabilis. (*Williams' Cat.* 1882, 28.) G. Colour var. of *Euphorbia pulcherrima.*

Poinsettia variabilis. (*Williams' Cat.* 1882, 28.) G. Colour var. of *Euphorbia pulcherrima.*

Polemonium cæruleum campanulatum. (*G. C.* 1892, xii. 399.) H. Polemoniaceæ. H. herb. per., with pendent bell-shaped fl. of a bright lilac-blue, with golden stamens. L. pinnatifid: leaflets lanceolate. Northern Europe.

—— Var. **himalayanum.** (*G. C.* 1887, i. 766.) H. per. A var. with the infl. hairy, and fl. much larger than in the typical form, the corolla being 1½ in. in diam., lilac-blue. Himalaya.

Polemonium confertum. (*G. C.* 1885, xxiv. 12, f. 3.) H. A beautiful dwarf species with curiously pinnate l.: pinnæ densely crowded and overlapping each other; fl. funnel-shaped, rich blue, and crowded into an ovoid spike; whole plant more or less densely covered with musk-scented glandular hairs. Rocky Mountains.

Polemonium flavum. (*B. M.* t. 6965.) H. species 2–3 ft. high, loosely tomentose in the upper part. L. pinnate, with lanceolate segments. Cymes corymbose or panicled. Fl. light yellow, 1 in. in diam. New Mexico.

Polemonium pauciflorum. (*G. C.* 1889, v. 772; vi. 96, f. 15.) H. per. 1–1½ ft. high, branching and leafy, glandular pubescent; fl. funnel-shaped, 1½–2 in. long, yellow, tinged with red on the outside; l. pinnate; leaflets narrow, lanceolate, acute, 1 in. long. Mexico.

Polybotrya lechleriana. (*G. C.* 1886, xxv. 394, 400 l. f. 79–80.) Filices. S. fern with creeping stem and large broadly deltoid ovate acute 4-pinnate fronds. Pinnæ oblong-lanceolate, acuminate, overlapping. Pinnules almost sessile, oblong, acute, cut into blunt oblong pinnatifid pinnulets. [*Acrostichum lechlerianum*, Hook.] Peru; Ecuador.

Polycycnis Lehmanni. (*K. B.* 1894, 365; *G. C.* 1895, xviii. 245, f.) Orchidaceæ. S. Pseudobulbs oblong, sulcate, 1 in. long, each bearing a lanceolate l. 7 in. long: scape pendulous, 9 in. long, many-flowered; fl. 1½ in. across, light brown, spotted with purple; disc covered with long white hairs. Colombia.

Polygala Galpini. (*B. M.* t. 7439.) Polygalaceæ. G. A slender straggling shrub 3–5 ft. high. L. ovate, acuminate, 3 in. long; fl. in axillary erect racemes 4 in. long; pedicels ¼ in. long; corolla 1 in. long, rosy lilac. Swaziland.

Polygonum baldschuanicum. (*Gfl.* t. 1278: *B. M.* t. 7544.) Polygonaceæ. H. per. of climbing habit. L. 1–1½ in. long, cordate-ovate, acute, petiolate. Fl. in large terminal panicles, bright pink. Eastern Bokhara.

Polygonum compactum. (*B. M.* t. 6476.) H. herb. per. with stems at first prostrate, then ascending, 2 ft. high, broadly ovate acute l. sub-cordate at the base, and erect racemes of white fl. Japan.

Polygonum lanigerum. (*Gfl.* 1890, 224, f. 52; *Damm. Cat.* 1890–1, 63.) H. H. herb. per. 6–10 ft. high, with long lanceolate l. wavy on the margin, covered with a silvery tomentum: fl. in clustered spikes, carnation-red. Tropics of Old World.

Polygonum multiflorum. (*G. C.* 1881, xvi. 524.) H. per. climber or trailer, with a tuberous root and numerous long slender reddish stems which die down in winter. L. cordate-ovate, acute, 4 in. long, 3 in. broad, shining, deep green. Fl. small, whitish, in loose spreading panicles. Japan; China.

Polygonum orientale variegatum. (*R. H.* 1892, 37. f. 8.) H. form with variegated leaves.

Polygonum sphærostachyum. (*B. M.* t. 6847; *Gard.* 1889, xxxv. 548; xxxvi. 109, 463.) H. Roots tuberous. Stem solitary, erect, leafy, 4–9 in. high: l. 3–6 in. long, linear or linear-oblong, acute, crisped, glabrous and glaucous, or pubescent underneath; spike 1–2 in. long, cylindrical; fl. ⅓ in. long, drooping, blood-red. Himalaya.

Polypodium californicum. (*G. and F.* 1888, 341.) Filices. H. H. or H. Fern about 9 in. high. Fronds pinnate, lanceolate or ovate-lanceolate; the segments narrow, oblong, acute, serrate, placed rather close together. California.

Polypodium Dianæ. (*Fl. and P.* 1876, 187.) S. or G. evergreen Fern growing 3–5 ft. high, with short stout erect caudex crowned with broad spreading fronds. Stipes thickly clothed with broad ovate acuminate brown scales, intermixed with smaller ones which are continued up the rhachis. Fronds ample, broadly ovate. herbaceous, glabrous above, downy beneath, bipinnate; pinnules ½ in. long, lanceolate or oblong, serrate or entire. [*P. molle*, Roxb.] St. Helena.

Polypodium Krameri. (*G. C.* 1881, xv. 136.) H. A pretty little fern in the way of *P. Phegopteris*, with membranous glabrous bipinnatifid pale green fronds sub-triangular in outline, 5–6 in. long, articulated to the top of the pale green stipes; pinnæ deflexed, oblique, cut into oblong crenate lobes. Sori scattered over every part of the frond. Japan.

Polypodium macrourum. (*G. C.* 1886, xxv. 136.) S. fern resembling *P. Phymatodes* in habit and size, but distinguished by its long-tailed fronds, which are rhomboid-caudate, 2–3 ft. long, 6–12 in. broad, bright green. The lanceolate tail has its middle part pinnatifid. Queensland?

Polypodium Picoti. (*R. H.* 1886, 206, f. 62.) G. Fern with numerous arching wavy elongate-oblong entire coriaceous fronds, 3 ft. or more long, and 4–6 in. broad, shining green above, glaucous beneath. Brazil.

Polypodium schneiderianum. (*G. C.* 1894, xv. 665; *Gard.* 1894, xlv. 472.) G. A supposed garden hybrid between *P. aureum* and *P. vulgare elegantissimum*. The fronds are 2 ft. long, and the pinnæ are wavy and crested.

Polypodium vulgare cristatum. (*Fl. and P.* 1882, 37.) H. A remarkable var. of robust habit, with the fronds irregularly branched. crested, cornute, and conglomerate.

—— Var. **Fowleri.** (*Fl. and P.* 1882, 37.) H. Differing from var. *cornubiense* in being permanently decompound.

Polyscias paniculata. (*G. C.* 1887, ii. 366.) Araliaceæ. S. The correct name for the shr. grown in gardens as *Terminalia elegans*.

Polystachya Buchanani. (*K. B.* 1893, 335.) Orchidaceæ. S. Very similar to *P. luteola*. L. about 6 in. long; scapes 12 in. long; fl. small, yellowish, with faint traces of purple. East Tropical Africa.

Polystachya bulbophylloides. (*K. B.* 1891, 199.) S. A minute species with the habit of a small *Bulbophyllum*, and having sub-sessile white fl. with an orange spot on the lip. West Tropical Africa.

Polystachya dixantha. (*G. C.* 1882, xvii. 294.) S. A curious species in the way of *P. rigida*, but taller. Fl. ochraceous; the lip dark yellow, with purple side lobes and orange-coloured callus. West Tropical Africa.

Polystachya hypocrita. (*G. C.* 1881, xvi. 685.) S. Much in the way of *P. luteola*, but larger. Fl. light green, with a few brown spots at the base of the blunt chin. Lip whitish, mealy; middle lobe very crisp. West Tropical Africa.

Polystachya imbricata. (*K. B.* 1893, 172.) S. Near *P. ensifolia*. Stems and l. each about 3 in. long; spike short, branched, bearing small yellow and pink fl. East Tropical Africa.

Polystachya Kirkii. (*K. B.* 1895, 282.) S. Allied to *P. lawrenceana*. Pseudobulbs narrow, 2 in. long. L. linear-oblong, 5 in. long. Scape flattened, 3 in. long; fl. ½ in. across, white, the lip margined with purple. East Tropical Africa.

Polystachya lawrenceana. (*G. C.* 1893, xiv. 150.) S. Very near *P. laxiflora*, differing in its simple raceme and in the colour of its fl., which are pale lilac and green. British Central Africa.

Polystachya leonensis. (*G. C.* 1888, iii. 648.) S. An unattractive species with thick velvety roots, depressed-globose pseudobulbs, ½ in. in diam., arranged on the rhizome so as to touch one another, velvety scape and pedicels, and racemose light green fl. with a white lip which is covered with a white meal on the central keel and basal part. Sierra Leone.

Polystachya rufinula. (*G. C.* 1879, xi. 41.) S. Much like *P. luteola*, with stick-like pseudobulbs thickened at the base, 2 in. or less long. L. narrow, ligulate, blunt, in pairs at the time of flowering. Raceme few-flowered. simple (always?). slightly hairy. Sep.

cinnamon-brown outside, greenish inside, washed with light brown on the borders. Pet. greenish, with brown tips. Lip yellowish on the disk, with a longish ridge and covered by fragile hairs, producing the furfuraceous surface; front borders light purple. Zanzibar.

Polystachya villosa. (*K. B.* 1894, 393.) S. species with linear-lanceolate l. 10 in. long, and an erect scape 3 in. long, bearing small hairy pale green fl. with a white lip. East Tropical Africa.

Polystachya villosa. (*J. O.* 1896, 139.) S. A curious species with flat round disk-like pseudobulbs furnished with two erect lanceolate-spathulate acute l. and deep violet-purple hairy fl.-stems bearing somewhat fleshy old-gold-coloured fl. more or less tinged with red. Madagascar. [From the description this appears to be *P. affinis*, of Lindl. West Tropical Africa.]

Polystachya zambesiaca. (*K. B.* 1895, 192.) S. A small plant with lanceolate l. 3 in. long and short scapes of yellow and brown fl. British Central Africa.

Polystichum acrostichoides grandiceps. (*G. C.* 1882, xvii. 492.) Filices. H. A form with the apices of the pinnæ crested. [*Aspidium acrostichoides*, Sw. var.] North America.

Polystichum angulare Lathami. (*G. C.* 1880, xiv. 662.) H. A dwarf var. with densely crowded overlapping pinnæ. [*Aspidium angulare*, Willd. var.]

—— Var. **perserratum.** (*Fl. and P.* 1882, 37.) H. fern, in the way of var. *Baylie*, but larger, and having the pinnules deeply incised.

Polystichum constrictum. (*G. C.* 1895, xviii. 588.) H. A Shield Fern of garden origin.

Polystichum lentum. (*Bull Cat.* 1880, 6.) S. Fronds lanceolate, pinnate, growing on the top of an erect caudex. Pinnæ short, almost sessile, spiny-toothed, more or less lobed. [*Aspidium auriculatum*, Sw. var. *lentum*, Baker.] India.

Polystichum polyblepharum. (*Bull Cat.* 1883, 15.) H. A fine evergreen fern with bipinnate fronds: lower pinnæ deflexed; pinnules marginal, trapezoid-ovate or oblong, with a few coarse deep teeth, the lower anterior pinnules longest and deeply lobed. Japan.

Polystichum tripteron. (*G. C.* 1881, xv. 74; *Veitch Cat.* 1881, 17.) H. Fronds 1–1½ ft. long, hastately 3-lobed; basal lobes or pinnæ 4–6 in. long, shortly stalked, pinnate, acuminate; pinnules falcate, acuminate, auricled, toothed; central pinnæ lanceolate, acuminate, pinnate, with pinnules resembling those of the basal pinnæ. [*Aspidium tripteron*, Kunze.] Japan.

Polystichum vestitum grandidens. (*G. C.* 1882, xviii. 776; *Fl. and P.* 1883, 11.) H. Fronds lanceolate or ovate, bipinnate: pinnules with deeply incised margins, or cut into long spine-pointed teeth. [*Aspidium aculeatum*, Sw. var.]

Polystichum viviparum. (*Bull Cat.* 1880, 6. f. 4.) G. An evergreen fern with an erect dark-scaled caudex bearing glossy green pinnate arched fronds, producing buds at the tip, which become young plants. Fronds 18 in. long. [*Aspidium viviparum*, Fée.] West Indies.

Pommereschea Lackneri. (*Gfl.* 1895, 131, f. 35.) Scitamineæ. S. A quick-growing foliage plant much resembling *Phrynium* in habit. Fl. golden yellow. Burma.

Ponera Kienastii. (*G. C.* 1877, vii. 810.) Orchidaceæ. S. epiphyte with creeping stem, bearing small pseudobulbs, with single ligulate or linear somewhat acute very thick glaucous l. Raceme very slender, 1-2-flowered. Fl. with a well-developed chin. Sep. ligulate, acute, greenish, with a brown hue. Pet. linear, acute: lip oblong, sub-acute, with a transverse callus at the base. [*Scaphyglottis Kienastii*, Hemsl.] Mexico.

Ponera pellita. (*G. C.* 1880, xiv. 8.) S. A curious epiphyte. L. 5 in. long, ½–¼ in wide, linear, bidentate. Fl. small, terminal. Sep. and ovary hairy outside. Pet. broad, shortly apiculate, yellowish, with longitudinal purple lines. Lip whitish or yellowish, with dark purple radiating streaks, 4-lobed.

Populus alba bolleana. (*B. H.* 1879, 269.) Salicaceæ. H. tree of pyramidal form. Young shoots tomentose. L. deeply and unequally lobed, the

lobes more or less toothed ; upper surface shining green ; under surface silvery white, and not discolouring during summer. [*P. alba*, Linn., var. *pyramidalis*, Spach.]

Populus bolleana. (*R. H.* 1881, 40.) H. The same as *P. alba bolleana*. [*P. alba*, Linn., var. *pyramidalis*, Spach.]

Populus canadensis aurea Van-Geerti. (*Ill. H.* 1876, 232.) H. tree. Like the type, but with golden-yellow l. on red petioles. Spontaneous variation of a branch on a large tree of the type. [*P. deltoidea*, Marsh., var. *aurea*, Van Geert.]

Populus Eugenii. (*Gfl.* 1887, 674 ; *G. C.* 1887, ii. 818.) H. The same as *P. pyramidalis meetensis*. [*P. deltoidea*, Marsh., var.]

Populus steiniana. (*Gfl.* 1888, 173, f. 37–8, 396 ; *G. and F.* 1888, 139.) H. Garden hybrid.

Populus Viadri. (*Gfl.* 1890, 447.) H. tree something in the way of *P. nigra*, but branching lower down the trunk ; the branches more curved and more branched, the l. more cordate and paler beneath, and the tree more fertile. Germany.

Portenschlagia ramosissima. (*W. G.* 1888, 339.) Umbelliferæ. H. per, with ternately decompound l. cut into linear ultimate segments, ½–1 in. long. Stem verticillately branched ; umbels compound, dense ; fl. yellowish white : fr. shortly hairy. Dalmatia.

Portulaca grandiflora Regeli. (*Gfl.* t. 1209.) Portulacaceæ. H. H. Plant of very dwarf habit with terete fleshy l. and handsome pink fl. with a darker blotch at the base of each pet. Chile.

Portulaca somalica. (*G. C.* 1886, xxvi. 134.) S. succulent of botanical interest, 8–10 in. high, with scattered terete acuminate l., and pretty bright yellow fl. 1 in. in diam., disposed in terminal clusters of three. Somaliland.

Potentilla dahurica × fruticosa. (*M. D. G.* 1896, 49.) Rosaceæ. H. A garden hybrid between the two species named.

Potentilla micrandra. (*M. D. G.* 1896, 48.) H. A low bush about half as tall as *P. fruticosa* with pinnate l. and dark yellow fl. Japan.

Potentilla nitida. (*Gfl.* t. 858, f. 1.) H. Alpine plant of very dwarf tufted habit. L. trifoliolate, silvery white. Fl. solitary, large, pale rose. Europe.

Potentilla parvifolia. (*M. D. G.* 1896, 26.) H. A dwarf much-branched shrub with yellow fl. Siberia.

Potentilla unguiculata. (*B. M.* t. 6560.) H. per. herb of slender habit, clothed with silky white hairs. L. long and narrow, pinnate : leaflets small, deeply 2 4-sect and densely packed along the rhachis. Fl. ½ in. in diam., white, disposed in an open cyme. California.

Pothos argenteus. (*Bull Cat.* 1887, 11.) Araceæ. S. foliage plant of climbing habit, with obliquely ovate acuminate l. of a silvery-grey, with the margin and a band along the midrib deep green. Borneo.

Pothos aureus. (*Ill. H.* 1880, t. 381.) S. evergreen climber, with large cordate acute l. of a deep green, handsomely variegated with pale yellow and white. This is certainly not a *Pothos*, but probably a *Raphidophora*. Solomon Isles.

Pothos celatocaulis. (*G. C.* 1880, xiii. 200 ; *Veitch Cat.* 1880, 23 ; *Fl. des S.* t. 2419–20.) S. climber. The stems are flat on the under side, and are held in position by numerous roots. The l. are oblique, sessile, elliptic, of a dark velvety-green. It is a rapid grower. Borneo.

Pothos elongatus. (*Cat. Comp. Cont. d'Hort.* 1885, 8.) S. climber, with ovate-elongate l. 12–14 in. long by 6–10 in. broad, coriaceous, dark shining green.

Pothos enderianus. (*G. C.* 1884, xxi. 711 ; *Cat. Comp. Cont. d'Hort.* 1885, 8.) S. A climbing species. The foliage is of a sombre metallic black. Borneo.

Pothos flexuosus. (*Bull Cat.* 1884, 15, f. 7.) S. climber with flattened rooting stems and close-set obliquely ovate-lanceolate acute pale green l. India.

Pothos nigricans. (*Cat. Comp. Cont. d'Hort.* 1886, 8.) S. climber with spreading l., 5–6 in. long, of a shining blackish green.

Pothos nitens. (*Bull Cat.* 1887, 11.) S. climber with ovate acute l. obliquely cordate at the base, of a dark shining bronzy purplish green. Malay Archipelago.

Pothuava nudicaulis glabriuscula. (*Gfl.* t. 1096.) Bromeliaceæ. S. A glabrous var. of *Æchmea nudicaulis*, with obtuse spine-toothed l. and a lax spike of pale greenish yellow fl., having the axis and the large concave acuminate bracts carmine.

Prasophyllum laufferianum. (*Journ. de Bot.* 1888, 302–3, f.) Orchidaceæ. G. Terrestrial orchid with one slender terete l. channelled down one side, and a spike of several fl. about 1 in. in expanse. Sep. linear-lanceolate, dusky green. Lip ovate-oblong, acute, recurved, with wavy edges and two wavy folds running parallel with the margin and meeting near the apex. Australia.

Pratia angulata. (*G. C.* 1879, xii. 136.) Campanulaceæ. H. With slender creeping matted stems, roundish coarsely toothed thickish l. $\frac{1}{6}$ in. in diam., and long slender axillary pedicels bearing *Lobelia*-like white fl. New Zealand.

Prestœa Carderi. (*B. M.* t. 7108; *Gfl.* 1890, 424.) Palmæ. S. Known in gardens as *Geonoma Carderi*.

Primula acaulis iberica. (*R. H.* 1885, 557.) Primulaceæ. H. A var. of the primrose with lilac fl. [*P. vulgaris*, Huds. var.]

Primula admontensis. (*G. C.* 1884, xxii. 808.) H. A natural hybrid between *P. Auricula* and *P. clusiana*. Upper Styria.

Primula Arctotis. (*Gfl.* t. 1198, f. b.) H. A natural hybrid between *P. Auricula* and *P. viscosa*.

Primula blattariformis. (*G. C.* 1887, i. 575.) G. Clothed with short papilliform hairs, with ovate or obovate deeply crenate and crested l., and a raceme 8–12 in. long, bearing numerous scattered lilac fl. with broadly obcordate lobes. Yunnan, China.

Primula calycantha. (*W. G.* 1892, 237.) H. Primrose with a rosette of smooth grey-green l and many-flowered umbels of reddish blue fl. Yunnan, China.

Primula capitata. (*B. M.* t. 6916, f. B.) H. Here is figured a var. with a looser head of much larger violet-purple fl. than usual. Sikkim.

Primula cashmeriana. (*F. M.* t. 360, f. 2.) H. per. L. oblanceolate with somewhat revolute denticulate margins. Fl. in a dense semi-globose umbel, rather small, purple, with a small yellow eye. [A form of *P. denticulata*, Sm.] Cashmere.

Primula denticulata variegata. (*W. G.* 1889, 406.) H. A garden var. with white-bordered l.

Primula dolomitis. (*G. C.* 1884, xxi. 577; *Fl. and P.* 1884, 124.) H. Much like *P. ciliata*, but l. more distinctly crenate and corolla longer; its tube $\frac{1}{2}$ in. long, with broadly funnel-shaped limb, bright lemon yellow. Tyrol.

Primula elatior calycantha. (*Gfl.* 1886, 242, f. 17.) H. per. having a large leafy frilled and lobed calyx, coloured like the corolla.

Primula finmarchica. (*G. C.* 1892, xii. 399.) A dwarf hardy per. nearly allied to *P. sibirica*. Fl. dark lilac. L. lanceolate. Lapland.

Primula floribunda. (*B. M.* t. 6712; *G. C.* 1883, xix. 113, f. 17; *Fl. and P.* 1883, 42.) G. or H. H. Primrose with stalked elliptic-lanceolate toothed glandular-pubescent l. and whorls of small yellow fl. on erect scapes 4–8 in. high. Western Himalaya.

—— Var. **grandiflora.** (*Gfl.* t. 1424.) H. H. Differs from the type in having larger fl.

Primula Forbesii. (*Gard.* 1891, xl. 556; *B. M.* t. 7246; *G. C.* 1883, xix. 113, f. 17.) H. H. A Primrose, midway between *P. cortusoides*, which it resembles in the leaves, and *P. farinosa*, which it resembles in the fl.; fl. in three to six whorls, pale lilac. Yunnan, China.

Primula geraniifolia. (*B. M.* t. 6984; *G. C.* 1888, iii. 305.) H. Primrose, with roundish-cordate obtuse bluntly lobed hairy l. on distinct hairy petioles and a several-flowered umbel of bright purple fl. $\frac{1}{2}$ in. in diam. on long hairy scapes. Eastern Himalaya.

Primula grandis. (*Gfl.* t. 968.) H. per. A distinct and striking plant, with long-stalked large elliptic-oblong obtuse l., cordate at base, denticulate, and many-flowered umbels of drooping

rather small fl. The corolla is deeply 5-lobed, but the oblanceolate lobes are straight with the tube, and not in the least spreading. Caucasus.

Primula imperialis. (*G. C.* 1891, ix. 729; *G. M.* 1891, 758, f.; *J. of H.* 1891, xxiii. f. 1; *Gard.* 1891, t. 823; *B. M.* t. 7217.) G. The true Javan plant, which differs specifically from the Himalayan Primrose figured in *B. M.* t. 6732 under *P. prolifera*. The l. of the former are 15 in. long and 5 in. wide; the scape erect, 3–4 ft. high; the fl. in four to six whorls, rich cowslip-yellow, tinged with orange.

Primula nivalis. (*Gfl.* t. 930; *R. H.* 1878, 11. f. 1–3.) H. L. oblanceolate, with revolute dentate margins. Fl. ¾ in. in diam., deep rose or purple, arranged in an umbel or in two whorls. There are four forms of this plant, which may be thus distinguished:—*P. nivalis*, type, l. and peduncles glaucous: var. *farinosa*, underside of l. covered with a whitish meal; var. *longifolia*, l. much longer and narrower than in the type, mealy beneath, fl. deep purple: var. *turkestanica*, fl. deep rose, usually arranged in two whorls. Central Asia, &c.

Primula obtusifolia. (*B. M.* t. 6956; *G. C.* 1887, ii. 341.) H. A beautiful alpine with stalked oblong obtuse glabrous irregularly toothed l., and umbels of deep claret-purple fl., with blackish brown calyces. Sikkim.

Primula petiolaris nana. (*B. M.* t. 7079, f. B; *Gard.* 1889, xxxv. 253.) H. H. A dwarf var. of an extremely variable type. L. almost sessile, obovate, oblong, or spathulate; scape very short; fl. 1 in. in diam.; the corolla-lobes obcordate, dentate, lilac-purple, with a white and yellow eye. Himalaya.

Primula poculiformis. (*B. M.* t. 6582.) G. per. In the way of *P. cortusoides*, with long-petioled cordate-elliptic obtuse irregularly crenate l., and long-peduncled umbels of bright mauve or lilac fl. ¾ in. in diam.; calyx broadly campanulate, shortly 5-toothed. [*P. obconica*, Hance.] China.

Primula Poissoni. (*G. C.* 1889, vi. 361; *R. H.* 1889, 491; *B. M.* t. 7216.) G. or H. H. Allied to *P. prolifera*. Glabrous, 4–6 in. high: l. narrowly oblong, with a broad dilated clasping base; margins serrate. Fl. in whorls, rich purple, ½–¾ in. in diam. Yunnan, China.

Primula prolifera. (*B. M.* t. 6732: *R. H.* 1884, 384; *Fl. and P.* 1884, 28; *Gfl.* t. 1204.) G. or H. H. A pretty species, with large obovate-oblong l. denticulate on the margins, and a tall scape bearing several whorls of yellow fl. ½ in. in diam. Himalaya.

Primula pusilla. (*B. M.* t. 7079, f. B.) H. H. Dwarf species, nearly allied to *P. sapphirina*. Stem 2–3 in. high; fl. capitate, rich purple-violet, and readily distinguished from its many allies by the ring of woolly hairs at the mouth of the corolla-tube; l. in dense rosettes, oblanceolate, obtuse, pinnatifid-dentate: teeth recurved. Himalaya.

Primula Reidii. (*G. C.* 1886, xxv. 168: *B. M.* t. 6961.) H. per. with ovate-lanceolate silky-pubescent l., and umbels of 2–3 large drooping cream-coloured fl. 1 in. in diam. Kumaon. North India.

Primula rosea. (*B. M.* t. 6437; *F. M.* t. 360, f. 1.) H. per. Alpine primrose of compact tufted habit, with oblanceolate crenulate l. 2–3 in. long, dark green above, paler beneath, and umbels of bright rose-coloured fl. Himalaya.

Primula Rusbyi. (*Gfl.* 1886, 117; *B. M.* t. 7032.) H. species, with oblong-spathulate denticulate l., and scapes 5–10 in. high, bearing 6–10-flowered umbels of deep purple fl. with a yellow eye. The calyx is mealy-white at the base, the mealy part running up between the lobes in acute tooth-like patches. New Mexico.

Primula sapphirina. (*B. M.* t. 6961, f. A; *G. C.* 1887, ii. 21.) H. A diminutive species, 1½–3 in. high, with a rosette of spathulate coarsely-toothed l., ½ ¾ in. long, and few-flowered umbels of nodding purple fl., about ⅓ in. in diam. Sikkim Himalaya.

Primula sibirica kashmiriana. (*B. M.* t. 6493.) H. per. A pretty plant with petioled oval l. and umbellate rose-pink fl. Western Himalaya.

Primula spectabilis. (*Fl. and P.* 1880, 73. t. 514. f. 1.) H. L. elliptic, thick and fleshy, with entire cartilaginous margins. Scape 3–4 in. high, bearing an umbel of 6–8 large deep rosy purple fl. Eastern Alps.

Primula Steinii. (*Gfl.* t. 991, f. 1–3.) H. Garden hybrid between *P. hirsuta* and *P. minima*.

Primula suffrutescens. (*G. C.* 1883, xx. 40; 1888, iv. 38; *Fl. and P.* 1883, 157.) H. alpine Primrose with creeping stems and rosettes of evergreen thick leathery spathulate l. coarsely toothed at the apex. Scapes 3–4 in. high, bearing 3–7 deep maroon-purple fl., with a yellow eye, about 1 in. in diam. California.

Primula Venzoi. (*G. C.* 1887, i. 320.) H. hybrid.

Primula vinciflora. (*G. C.* 1887, i. 575 f. 108.) H. per. with cuneate-oblong ciliate l. covered with reddish sessile glands. Scape hairy, bearing one large *Vinca*-like purple-violet fl. 1½ in. in diam., with a long pubescent tube swollen at the base. Yunnan, China.

Primulina sinensis. (*Gfl.* 1890, 478; *B. M.* t. 7117.) Gesneraceæ. This is *P. Tabacum*, which see. China.

Primulina Tabacum. (*G. C.* 1889, vi. 356. f. 52; *R. H.* 1889, 516; *W. G.* 1889, 445.) H. per. alpine, with the habit and fl. of a *Primula*, exhaling an odour of tobacco, 4–6 in. high; l. suborbicular or oblong, obtuse, cordate; margins lobed; fl. in loose corymbs, violet-purple; peduncles and calyces glandular-hairy. Native name Shek-in, *i.e.* Rock Tobacco. China.

Pritchardia macrocarpa. (*Ill. H.* 1879, t. 352.) Palmæ. S. Of bold habit, with large roundish flabellate plicate l. divided ⅓ of the way down into numerous linear-lanceolate acute segments something like *P. Martii*, but more robust and with larger l. [*P. Gaudichaudii*, H. Wendl.] Sandwich Islands.

Pritchardia Periculorum. (*Fl. and P.* 1883, 93.) S. A fan-leaved Palm, resembling *P. vuylstekeana*, but differing in having dark brownish golden petioles, and obliquely spherical fr. Low Archipelago, Pacific.

Pritchardia Thurstoni. (*Gfl.* 1887, 486–9. f. 123, 124. 1–8; *G. C.* 1887, ii. 341; *R. H.* 1887. 459.) S. A fine Palm with a tall stem crowned with a dense tuft of large fan-shaped palmatisect l., from the axils of which arise the slender fl.-stems, which are longer than the l., and bear a compact panicle of fl. at their apex. Fiji.

Pritchardia vuylstekeana. (*R. H.* 1883, 329. f. 59; *G. C.* 1883. xix. 693, f. 114.) S. With thick trunk and large deep-green l., palmately cut into many segments. Low Archipelago, Pacific.

Priva lævis. (*Gfl.* t. 1131.) Verbenaceæ. H. or H. H. herb. per. with opposite petiolate ovate toothed glabrous l., and handsome terminal spikes of purple fl. ½ in. in diam. Argentina, &c.

Promenæa microptera. (*G. C.* 1881, xvi. 134.) Orchidaceæ. G. In the way of *P. xanthina*, but with very small lateral lobes to the lip; basal keels emarginate in front; disk with a small callus. Fl. light ochre, with some purple zones and spots on the lip. [*Zygopetalum micropterum*, Reichb. f.]

Promenæa stapelioides heteroptera. (*G. C.* 1883, xx. 70.) G. A curious var. having the sep. only partly blotched and striped with a lighter brown than the pet., which are like the type, but with more stripes. [*Zygopetalum stapelioides*, Reichb. f. var.]

Protea nana. (*G. C.* 1889, v. 523; *B. M.* t. 7095.) Proteaceæ. G. A dwarf species, with pine-like l. and nodding cup-shaped crimson fl.-heads, 2½ in. across. South Africa.

Protea rhodantha. (*B. M.* t. 7331.) G. A species with a short swollen stem, twisted branches and sessile linear-oblong green l.; fl.-heads terminal, 3 in. across, rose-coloured with orange stamens. Transvaal.

Prunus alleghaniensis. (*G. and F.* 1890, 429, f. 53.) Rosaceæ. H. A deciduous shr. or small tree nearly allied to the European *P. insititia*. United States.

Prunus baldschuanica. (*Gfl.* 1890, 613; *Acta Hort. Petrop.* 1890, xi. 314.) H. shr. or dwarf tree, in the way of *P. divaricata*, but with obovate-elliptic coarsely and doubly serrate l., an ovate-cylindric calyx-tube, and red fl. Baldschuan, Bokhara.

Prunus Capuli. (*R. H.* 1888, 137, f. 30.) H. shr. or small tree, with deciduous oblong or elliptic-oblong acute finely-toothed l., glaucous green beneath, and terminal racemes of white

fl. similar to those of *P. Padus*. Fr. red, pulpy, resembling a small cherry. The Capollin or Capulinos of Mexico. [*P. Capollin*, Zucc.]

Prunus cerasifera contorta. (*R. H.* 1895, 201, f. 57.) H. Differing from the type in being more fastigiate in habit and in having the l. spirally twisted.

Prunus Chapronii. (*R. H.* 1881, 467, f. 114.) H. tree with elliptic acute serrulate l., and depressed globose fr. about $1\frac{1}{2}$ in. in diam., shining, red, punctate with white, of an agreeable acid flavour. Roumania.

Prunus curdica. (*M. D. G.* 1896, 26.) H. Intermediate between *P. spinosa* and *P. insititia*. Asia Minor.

Prunus domestica Plantierii. (*R. H.* 1884, 504.) H. An ornamental var. producing an abundance of semi-double pure white fl., succeeded by black plums of good flavour.

Prunus hybrida reptans. (*R. H.* 1886, 416, f. 107–8.) H. A hybrid of *P. japonica* and *P. pumila* with red flowers and prostrate divaricate somewhat naked branches.

—— Var. **stricta.** (*R. H.* 1886, 417, f. 109.) H. A hybrid of *P. japonica* and *P. pumila* with white flowers and erect branches.

Prunus Jacquemontii. (*B. M.* t. 6976; *G. and F.* 1888, 48, 200; *R. H.* 1888, 479.) H. shr. with slender glabrous branches, ovate or ovate-lanceolate or elliptic acute serrate l., and clusters of 2–3 pink fl., about $\frac{1}{3}$ in. in diam., appearing with the l. Calyx tubular, $\frac{1}{6}$–$\frac{1}{4}$ in. long, glabrous. North-west Himalaya.

Prunus japonica sphærica. (*R. H.* 1890, 468, f. 136, t.) H. A garden var. with globose fr. of a dark vinous red.

Prunus juliana pendula. (*Späth Cat.* 1889–90, 3.) H. A garden form with pendulous branches.

Prunus Laurocerasus schipkaensis. (*Späth Cat.* 1889–90, 2.) H. An especially hardy form, from the northern slopes of the Balkan Mountains.

Prunus Maureri. (*Gfl.* 1888, 124.) H. Garden hybrid.

Prunus miqueliana. (*G. and F.* 1888, 196, 199, f. 37.) H. tree. This is said to be confounded in gardens with *P. pendula*, but the bark is darker, the fl. are corymbose on short leafy shoots, the pedicels bracteate at the base, and, as well as the shorter and paler calyx, sparsely hairy; the pet. are more narrowly obovate and of a paler pink or nearly white; the l. are broader, thinner, and more deeply and irregularly cut; they are pubescent beneath like the petioles and young shoots, and have 2 orange glands at their base. Japan.

Prunus Mume Alphandi. (*R. H.* 1885, 564, f. 101–3, t.) H. A var. with semi-double rose-pink fl. Also called *Armeniaca Mume Alphandi*. Japan.

Prunus orthosepala. (*G. and F.* 1894, 184, f. 34.) H. A densely branched twiggy shrub 4–5 ft. high and as much through. Fl. white, with exserted orange-coloured stamens; fruit globose, about 1 in. in diam. on a stout rigid stalk about $\frac{1}{2}$ in. long; skin very dark blue or nearly black with glaucous bloom; flesh of good flavour and quality, thick, juicy, yellow. Texas.

Prunus Pissardi. (*R. H.* 1881, 190, t.) H. Remarkable for its very dark red elliptic l. Fl. white. Persia.

Prunus præcox. (*R. H.* 1892, 488, f. 142–3.) H. shrub. A garden seedling of *P. japonica sphærica*.

Prunus Salzeri. (*G. C.* 1892, xii. 669.) Nearly related to *P. Padus*; fruit yellowish white. Plant said to come true from seed. Carinthia and Styria.

Prunus subcordata. (*Späth Cat.* 1889–90, 3.) H. shr. with roundish finely serrated l. slightly cordate at the base. Fl. as in the ordinary plum. California.

Prunus subhirtella. (*B. M.* t. 7508.) H. A small tree, the Cherry-like l. appearing after flowering. Fl. in fascicles of from three to five, white. Japan.

Prunus tomentosa. (*Gfl.* t. 853.) H. shrub. The new shoots tomentose. L. broadly elliptic, shortly cuspidate,

with small serratures, covered with a white tomentum beneath. Fl. white, subsessile, solitary or in fascicles of two to four. Japan.

Prunus Watsoni. (*G. and F.* 1894, 134, f. 25.) H. A twiggy dwarf Plum with fruit ⅔ in. in diam., with thick bright orange-red skin without bloom, and bright juicy yellow flesh, which, although slightly austere, is edible, and sometimes of good quality. Kansas, &c.

Pseudo-chænomeles Maulei. (*R. H.* 1882, 236, f. 52–5.) H. [*Pyrus Maulei*, Mast.]

Pseudodracontium Lacourii. (*B. M.* t. 6673.) Araceæ. S. per. with tuberous rootstock, solitary pedately divided l. with lanceolate acuminate leaflets, of a dark green, spotted with white, and with a scape as long as the petiole, with a light green slightly convolute spathe and sessile spadix shorter than the spathe, and with a conical fissured appendix. [Syn. *Amorphophallus Lacourii*, Linden & André.] Cochin China.

Pseudophœnix Sargenti. (*R. H.* 1887, 34.) Palmæ. S. Palm growing to 25 ft. in height, with pinnate l. 4½ ft. long, having lanceolate acuminate leaflets 12–16 in. long, glaucous beneath. Spadix panicled, about 3 ft. long and broad. Berries ¾ in. in diam., bright orange or red. Florida.

Pseudotsuga glaucescens. (*R. H.* 1895, 88.) Coniferæ. H. A very glaucous form of the Douglas Fir. [*Pseudotsuga Douglasii*, Carr.]

Psidium passeanum. (*R. H.* 1890, 233, f. 71.) Myrtaceæ. S. Shr. 3–6 ft. high, with slender round stems, opposite ovate-lanceolate acuminate l. on short petioles, and axillary white fl. The fr. is pear-shaped, about as large as a plum, pale green or yellowish, edible.

Psychotria jasminiflora. (*G. C.* 1879, xii. 200, f. 33, 34; *B. M.* t. 6454.) Rubiaceæ. S. This is the plant known as *Gloneria jasminiflora*.

Psychotria sulphurea. (*Gn.* 1887, 130.) S. A profuse and continuous-flowering small climbing shr. with shining green l., and clusters of *Centranthus*-like bright blue fl., and sulphur-yellow berries. Fiji.

Ptarmica grandiflora, flore pleno. (*R. H.* 1888, 573.) Compositæ. H. per. A double-flowered form of *Achillea Ptarmica*.

Ptelea trifoliata aurea. (*R. H.* 1886, 547.) Rutaceæ. H. Garden variety.

Pteris Bausei. (*Veitch Cat.* 1886, 12.) Filices. S. A decorative fern of compact habit, with densely tufted erect fronds 12–13 in. high. Stipes deep chestnut-brown. Pinnæ about 2 in. long, the lowermost bipinnate, consisting of 4–6 broadly linear deep green pinnules. [*P. semipinnata*, Linn. var *Bausei*, Hort.]

Pteris Childsii. (*G. C.* 1896, xx. 470.) G. Fronds compound; pinnæ much subdivided, the tips and margins being densely cristate.

Pteris cretica crispata. (*Veitch Cat.* 1891, 11.) G. A var. of dwarf compact habit, with broad pinnules, crisped and wavy along the margins and marked by a medium white band.

Pteris cristata. (*G. C.* 1892, xii. 249.) S. Garden var. of *P. ensiformis Victoriæ-Reginæ*.

—— Var. **nana.** (*R. H.* 1887, 90.) A garden var. of *P. serrulata*.

Pteris Drinkwateri. (*G. C.* 1896, xix. 592.) G. Probably a seedling var. of *P. umbrosa*, with fronds 2 ft. high and pinnæ ¾ in. wide, dark green.

Pteris ensiformis Victoriæ. (*G. C.* 1890, vii. 576.) S. Allied to *P. cretica*, but with more numerous and elegant fertile fronds prettily marbled with white. Malaya.

Pteris internata. (*Williams' Cat.* 1880, 17.) S. fern, in the way of *P. heterophylla*, with ovate tripinnate outer fronds, and longer bipinnate central fronds. West Indies.

Pteris longifolia Mariesii. (*Veitch Cat.* 1895, 9.) G. Differs from the type in its shorter fronds and narrower pinnæ. India.

—— Var. **nobilis.** (*Fl. and P.* 1884, 94; *Williams' Cat.* 1884, 14.) S. An evergreen fern of palm-like character, with pinnate fronds 4–5 ft. long; pinnæ linear, 8–10 in. long, ¾ in. broad. Polynesia.

Pteris Reginæ. (*G. C.* 1892, xii. 249.) S. Garden var. of *P. ensiformis*, also named *Victoriæ-Reginæ*.

Pteris serrulata Cowani. (*G. C.* 1883, xviii. 744.) G. Of dwarf habit with branched stipes, and broad-ended fronds with crested pinnæ.

—— Var. **gigantea.** (*G. C.* 1893, xiii. 79.) G. A var. with much larger fronds than the type.

—— Var. **lacerata.** (*Williams' Cat.* 1882, 28, f. 22; *Fl. and P.* 1882, 70.) G. The fronds are divided in a pinnately flabellate manner into numerous linear serrate segments crowded at the tips of the first divisions of the frond.

—— Var. **Leyii.** (*F. M.* 1876, No. 56.) G. A curious depauperate form with the leaflets elongated by long filiform extensions of their midribs.

—— Var. **Pocockii.** (*G. C.* 1884, xx. 426.) G. A var. with a short dense crest at the end of each segment of the drooping frond.

—— Var. **voluta.** (*Bull Cat.* 1895, 7.) G. Pinnæ markedly curled, the apex crested.

Pteris tremula foliosa. (*G. C.* 1886, xxv. 787.) G. A form with larger broader wavy and more leafy fronds than the type.

—— Var. **grandiceps.** (*G. C.* 1886, xxvi. 757; *Bull Cat.* 1887, 11.) G. Garden hybrid.

—— Var. **variegata.** (*G. C.* 1892, xii. 249.) G. Var. with variegated fronds.

Pteris umbrosa cristata. (*Bull Cat.* 1879, 7, f. 5.) G. A tall fern. Fronds erect, with drooping pinnæ and pinnules; the segments are all long and linear, much divided at the apices and crisped, deep green.

Pterisanthes polita. (*G. C.* 1896, xx. 182; *B. M.* t. 7561.) Ampelidaceæ. S. A climber with the habit of a *Cissus*, cordate l. 5 in. long and a fl.-rhachis flattened like a knife-blade, bearing stalked fl. round the margin and sessile fl. on the surface. Malaya.

Pterodiscus speciosus. (*G. C.* 1886, vi. 497, f. 98.) Pedaliaceæ. G. tuberous-rooted herb. Stems 2 ft. high, with opposite stalked l. oblong-obtuse, sinuate-toothed. Fl. solitary in the upper axils, large, funnel-shaped; the limb with 5 rounded lobes, lilac. South Africa.

Pterostylis Baptistii. (*B. M.* t. 6351.) Orchidaceæ. S. or G. terrestrial Orchid with singular fl. L. 4–5 to a tuber; scape 1–2 ft. high, terminating in one erect fl.. about 2 in. long, green, with the tips of the dorsal sep. and pet. brown-purple; the dorsal sep. and lateral pet. form an erect hood; the lateral pet. are united at the base, the free parts rapidly narrowing into long tails, which diverge and pass behind the hood on each side. New South Wales.

Ptychococcus arecinus. (*Cat. Comp. Cont. d'Hort.* 1886, 9.) Palmæ. Stated to be an elegant Palm from New Guinea, but no description given.

Ptychoraphis augusta. (*G. C.* 1892. xii. 397, f. 63.) Palmæ. S. An elegant little unarmed palm, recalling *Cocos weddelliana* when young, with graceful pinnate foliage. It is a native of the Nicobar Islands, where it forms a slender tree 100 ft. high.

Ptychosperma singaporensis. (*Bull Cat.* 1884, 15.) S. Palm with slender stems and gracefully drooping pinnate l. of a rich green. Singapore.

Pueraria thunbergiana. (*R. H.* 1891, 31, f. 8.) Leguminosæ. G. climber with trifoliate l. and axillary racemes of bluish violet fl. [Syn. *Pachyrhizus thunbergianus*, Sieb. & Zucc.; *Dolichos hirsutus*, Thunbg.; *D. japonicus*, Hort.] Japan.

Pultenæa Gunnii. (*Gft.* t. 1173.) Leguminosæ. G. shr. with virgate branches, small linear-lanceolate l., and 3–5-flowered heads of small fl. terminating the branchlets. Fl. golden yellow, with brownish purple stripes on the standard, and a brownish purple keel. Australia.

Pultenæa rosea. (*G. C.* 1877, vii. 431.) G. Shrub of erect heath-like habit, with twig-like branches, glabrous or or slightly hairy. L. linear-terete, obtuse, about ½ in. long, channelled above by the involute margins, slightly scabrous. Stipules subulate-pointed. Fl. pink, in terminal heads, sessile. Bracts few, narrow, trifid. Bracteoles under the calyx linear-lanceolate.

Calyx silky-pubescent, 2½ lines long; teeth as long as the tube, the two upper more united. Pet. of nearly equal length, not twice as long as the calyx. Ovary villous; style subulate. Pod two lines long, acuminate. Australia.

Puya Gigas. (*B. H.* 1881, 314, f. 74.) Bromeliaceæ. S. A striking species with large *Agave*-like l. 3–4 ft. long, strongly toothed on the margins, mealy-white beneath. Fl.-stem rising to a height of 20–30 ft., ending in a long dense spike of whitish fl. Colombia.

Puya lanuginosa. (*G. C.* 1888, iv. 411.) S. A rather smaller species than *P. chilensis*, with recurved toothed l. silvery beneath, and a fl.-stem 3–4 ft. high. Fl. densely packed: calyx clothed with brown woolly hairs; corolla 2 in. long, pale sea-green. Figured in *G. C.* 1872, 1102, f. 259, under the name of *P. chilensis*. Peru.

Puya Roezli. (*B. H.* 1885, 80.) S. species with numerous thick coriaceous arching l. 2–2½ ft. long by 2–2½ in. broad, spiny on the margins, shining green above, covered with a white felt beneath. Panicle 2½ ft. high, downy. Fl. subsessile: calyx pale rose, downy: corolla tubular, 1½ in. long, peacock blue. [*Pitcairnia megastachya*, Baker.] Andes of Peru.

Pyrethrum aureum selaginoides. (*Fl. and P.* 1882, 12.) Compositæ. H. dwarf form, with flat shallowly-lobed yellow-green l. [*Chrysanthemum Parthenium*, Pers. var.]

Pyrethrum decaisneanum. (*R. H.* 1887, 185.) H. [*Chrysanthemum decaisneanum*, N. E. Br.]

Pyrethrum marginatum. (*R. H.* 1887, 185.) H. [*Chrysanthemum marginatum*, N. E. Br.]

Pyrethrum parthenifolium glaucum. (*B. T. O.* 1895, 22, f. 6.) H. A form differing from the type in having glaucous l. [*Chrysanthemum præaltum*, Vent. var.]

Pyrus angustifolia, flore pleno. (*B. T. O.* 1893, 180, f.) Rosaceæ. H. This is a double-flowered form of *P. coronaria*, Linn., not of *P. angustifolia*, Ait.

Pyrus betulæfolia. (*R. H.* 1879, 318, f. 68, 69.) H. tree flowering before the l. appear. L. on long petioles, elliptic, acute at both ends, serrate, 2 in. long, 1 in. broad. Fl. in sessile umbels: petals white: anthers deep red. Fr. small, sub-globose, brownish, dotted with white. China; Japan.

Pyrus cratægifolia. (*B. M.* t. 7423.) H. A bush or small tree with l. resembling those of *P. torminalis* in outline, but much thinner in texture. Fl. white, showy. Northern Italy.

Pyrus halliana. (*G. and F.* 1888, 152.) H. A semidouble form of *P. floribunda*, Nichols.

Pyrus heterophylla. (*H. G.* 1888, 560: *G. C.* 1890, vii. 115, f.) L. entire, or laciniate, or intermediate. Central Asia.

Pyrus Malus aurea. (*R. H. B.* 1889, 272; *Gfl.* t. 1425.) A form of the Crab-apple with the l. yellow, except a green patch in the centre.

Pyrus Parkmanni. (*G. and F.* 1888, 152.) H. A semidouble form of *P. floribunda*.

Pyrus thianschanica. (*Acta Hort. Petrop.* 1890, xi. 312, f.) H. shr. or small tree, very similar to *P. Aucuparia*, but with the buds tomentose and the young foliage villose. Central Asia.

Pyrus Tschonoskii. (*G. and F.* 1894, 54, f. 9.) H. The indigenous Pear-tree of Japan, where the continental *Pyrus sinensis*, a common cultivated fruit tree in all parts of the empire, has occasionally become naturalized.

Quaqua Hottentotorum. (*G. C.* 1879, xii. 8, f. 1.) Asclepiadaceæ. S. Succulent, dwarf, bushy, and leafless. Stems 4-angled, the angles armed with decussate stout spines. Fl. in fascicles along the grooves of the stems; corolla ¼ in. in diam., pale yellow, campanulate, with spreading lobes, glabrous except for a few very minute hairs in the tube. Corona double; outer of 5 minute sub-quadrate emarginate lobes, channelled down the face: inner of 5 hemispherical lobes resting on the backs of the anthers. Pollen masses flask-shaped, with a pellucid margin at the apex. Namaqualand, South-west Africa.

Quercus alnifolia. (*G. C.* 1880, xiv. 533; *Gard.* 1880, xviii. 486, f.) Cupuliferæ. H. H. L. small, ovate-oblong, deep green above, clothed with

dense golden down beneath. Acorns long, obovate, with a cup like that of the Turkey Oak. Mountains of Cyprus.

Quercus Daimio pinnatifida. (*W. G.* 1888, 287.) H. H. tree. A form with very large pinnatisect l., attaining 1 ft. or more in length. [Probably a laciniate form of *Q. dentata*, Thumb.]

Quercus georgiana. (*G. and F.* 1888, 465.) H. A low spreading bush, the foliage turning scarlet in autumn. L. long-stalked, somewhat obovate, cuneate at the base, with 3–5 entire acute or obtuse lobes with deep or shallow sinuses, very smooth. Acorns ellipsoid, with smooth shining saucer-shaped cups. Eastern United States.

Quercus glandulifera. (*G. C.* 1880, xiv. 714 5, f. 134.) H. Evergreen Oak of pyramidal habit. L. oblong, obtuse, distantly toothed. Peduncles short. Acorns clustered, ripening in the first year, ellipsoid, acute, rather more than twice the length of the hemispheric cup, which is densely covered with small obtuse ciliolate scales. Probably a garden hybrid between *Q. Ilex* and *Q. pedunculata.* [*Quercus Turneri*, Willd.; *Q. glandulifera*, Blume, is a different tree.]

Quercus macedonica. (*G. C.* 1892, xii. 669.) H. An oak of the *Cerris* group bearing large edible acorns. Italy to Asia Minor.

Quercus palustris Reichenbachi. (*M. D. G.* 1896, 27.) H. A form with the l. red from their first opening.

Quercus pedunculata Ahlfvengreni. (*Gfl.* 1894, 451.) H. form of the Pyramidal or Cypress Oak. Sweden.

—— Var. **Doumeti.** (*R. H.* 1894, 17, f. 3.) H. A form of the common oak with laciniated l.

—— Var. **umbraculifera.** (*M. D. G.* 1896. 2.) H. A form of broadly globose habit, raised as a seedling from acorns of *Q. pedunculata fastigiata.*

Quercus pontica. (*Nat. Arb. Zösch.* 1891, 18; *Gfl.* 1891, 509, f. 95; *G. C.* 1891. ix. 462.) H. tree with large elliptic coarsely toothed l., growing to 6 in. in length by 3 in. in breadth, glaucous beneath. Acorns small, subglobose, twice as long as their small scaly cup. Asia Minor.

Quercus Robur apennina aurea superba. (*Gfl.* 1885, 495.) H. A var. in which the l. are of a more intense golden tint than in the ordinary form.

Quercus schochiana. (*Cat. Nat. Arb. Zösch.* 1892, 26.) H. A hybrid between *Q. Phellos* and *Q. palustris.*

Quercus sessiliflora pendula. (*R. H.* 1887, 61.) H. A form with pendulous branches.

Quesnelia Enderi. (*Gfl.* 1888, 195. f. 41–3.) Bromeliaceæ. S. [*Q. lateralis*, Wawra. Syn. *Billbergia Enderi*, Regel.]

Quesnelia Van-Houttei. (*B. H.* 1881, 163, 350, t. 18.) S. A handsome plant with numerous long spinulose l. banded with grey beneath, and a tall scape with a large dense cylindric spike of white fl. with dark blue tips; bracts white, tipped with rose. Brazil.

Quesnelia wittmackiana. (*Gfl.* t. 1281, f. 2.) S. A plant with stiff erect channelled l. 3–4½ ft. long, with small spines on the edges, light green, transversely banded with white on the back. Fl.-stem shorter than the l., slender, reddish, bracteate. Spike short, composed of about 4 clusters of 2–3 fl. with red calyces and dark blue pet. South Brazil?

Ramondia pyrenaica alba. (*G. C.* 1886, xxv. 486.) Gesneraceæ. H. A var. only differing from the type in having white fl.

Ranunculus anemonoides. (*Fl. and P.* 1882. 155.) Ranunculaceæ. H. alpine per. A charming little plant with glaucous green biternately divided l., the segments cut into linear divisions; fl. rather large, white, tinted with pink, and pale rose outside. borne on peduncles 3–6 in. high. [*Callianthemum rutæfolium*, C. A. Mey. var. *anemonoides*, Hook. f.; *B. M.* t. 7603.] Alps.

Ranunculus Buchanani. (*Damm. Cat.* 1890–91, 80.) H. alpine. A dwarf species with the l. two or three times trifidly divided, and a fl.-stem 6–12 in. high, bearing one pure white fl. 2 in. or more in diam. New Zealand, at 5,000–7,000 ft. elevation.

Ranunculus carpaticus. (*B. M.* t. 7266.) H. A distinct and showy per.,

with creeping rootstock. Stem 1 ft. high. L. nearly orbicular in outline, palmate, crenate. Fl. 2 in. in diam., golden yellow. Eastern Hungary.

Ranunculus heldreichianus. (*Fl. and P.* 1882, 76.) H. per. An early-flowering species about 1 ft. high. L. tripartite, the lobes deeply incised. Fl. numerous, pale chrome-yellow, shining. [*R. sprunerianus*, Boiss. var.] Greece.

Ranunculus Lyallii. (*G. C.* 1879, xi. 620; *B. M.* t. 6888.) H. perennial, 2–3 ft. high, with large peltate l. 12–14 in. in diam. Fl. 3 in. in diam., pure white, in large loose panicles. New Zealand.

Ranunculus spicatus. (*G. C.* 1881. xv. 693, f. 124–5.) H. herb. per. dying down early in summer and appearing again in September and October. L. cordate-reniform or cordate-elliptic in outline, somewhat 3-lobed, irregularly toothed. Fl.-stem bearing 1–3 large bright yellow fl. Algeria.

Raphanus isatoides. (*R. H.* 1885, 372, f. 101.) Cruciferæ. H. A form of Radish with the general aspect of *Isatis tinctoria*. The radical l. are lyrate-pinnatisect, and the stem l. are ovate-lanceolate, amplexicaul, thick and glaucous. The fl. are yellow, in racemes terminating the side branches. Garden variety.

Raphiolepis salicifolia. (*R. H.* 1879, 60.) Rosaceæ. G. Fl. pure white, arranged in umbellate bunches. [*R. indica*, Lindl.; *Botanical Register* t. 468.] China.

Ravenea Hildebrandti. (*Ill. H.* 1880, t. 403; *B. M.* t. 6776.) Palmæ. S. Palm of dwarf habit, growing to a height of 10–12 ft. L. elliptic, oblong in outline, pinnate; leaflets numerous, narrow-lanceolate, acute. Comoro Islands.

Ravenia rosea. (*R. H.* 1880. 179.) Rutaceæ. G. shr. L. opposite, trifoliolate. Leaflets elliptic-obovate, entire. shining. Fl. axillary, 2½–3 in. in diam., rose-red. Brazil.

Rehmannia rupestris. (*G. and F.* 1890. 418; *B. M.* t. 7191.) Scrophulariaceæ. H. H. An interesting species 1–1½ ft. high. The central stem erect, the lateral ones all drooping: l. oval, fleshy, toothed, and covered with long silky hairs. Fl. tubular, white, tinged with rose. West China.

Reinwardtia tetragyna. (*Veitch Cat.* 1886, 13, f.; *B. M.* t. 7136.) Linaceæ. S. shr. It is very similar to *R. trigyna* (*Linum trigynum*) and only differs in having four styles instead of three. and rather deeper yellow fl. India.

Remijia pedunculata. (*Gard.* 1889, xxxv. 343, f.) Rubiaceæ. S. shr. Allied to *Cinchona*, and, like it. of value as a source of quinine. It has the habit of *C. officinalis*. Brazil.

Renanthera histrionica. (*G. C.* 1878, x. 74.) Orchidaceæ. S. epiphyte with acuminate l., and short few-flowered racemes. Sep. and pet. yellow, bordered with purplish blotches: lip white, with purplish blotches on the side lobes; spur orange. Malaya (?).

Renanthera imschootiana. (*K. B.* 1891, 200.) S. Allied to *R. coccinea*; with shorter perianth-segments. The fl. are reddish and yellow. Assam.

Renanthera matutina breviflora. (*G. C.* 1879, xii. 70.) S. A distinct var. differing from the type in its shorter sep., the lateral ones more free from one another, and the calli under the column larger. [*R. elongata*, Lindl.] Sunda Isles.

Renanthera Storiei. (*G. C.* 1880, xiv. 296; 1881, xvi. 364.) S. Fl. more than 2 in. across. Dorsal sep. and pet. dark orange: lower sep. broad, and of a most brilliant velvety crimson, with lighter shades of the same colour. Lip small, deep crimson, with small yellow bars; centre white. Philippines.

Restrepia Falkenbergii. (*G. C.* 1880, xiii. 232.) Orchidaceæ. S. This may easily be known by its one-coloured sheaths without blotches, and its large l. of a bluish purple underneath. Fl. yellow, with some white and purple marks. Colombia.

Restrepia pandurata. (*G. C.* 1887, i. 244.) S. Similar to *R. guttulata*, but larger, with a pandurate lip: front lobe transversely oblong, covered with warts, hairy, whitish, with purple-brown spots. Colombia.

Restrepia prorepens. (*G. C.* 1877, vii. 810.) S. Forming large masses of creeping rhizomes, with very small narrow fleshy l., emarginate at the apex, and with a small apiculus. Fl. yellow, solitary, on a long capillary peduncle, nodding; the upper linear sep. obtuse; lateral connate, boat-shaped, much narrower towards the top. Lip very small, scarcely equal to the column, pandurate, subacute, with a small angle before each base, and a lamella in the middle of each side. Costa Rica.

Restrepia sanguinea. (*K. B.* 1896, 44.) G. Resembling *R. pandurata*, but with crimson fl. The l. are elliptic, 2 in. long, and the peduncle is of the same length. Colombia.

Restrepia striata. (*G. C.* 1891, ix. 137.) G. Differs from other species of the genus in having striped instead of spotted sep. Otherwise it is not unlike *R. elegans*. Colombia.

Retinospora obtusa troubetzkoiana. (*G. C.* 1890, vii. 108; *H. G.* 1890, 232.) Coniferæ. H. shr. Garden variety.

Rhamnus libanotica. (*B. M.* t. 6721; *R. H.* 1880, 80; 1884, 288.) Rhamnaceæ. A hardy shrub 4–6 ft. high with alternate oblong-ovate or elliptic serrulate l., and small axillary cymes of greenish fl. Asia Minor.

Rhamnus robusta. (*R. H.* 1879, 100.) H. tree. L. broadly ovate-lanceolate, convex, 7–8 in. long, 3–3½ in. broad, coriaceous, dark green. Fl. small, green. Fr. globose, ½ in. in diam., black.

Rhaphithamnus cyanocarpus. (*B. M.* t. 6849.) Verbenaceæ. G. A much-branched spiny shr. with small ovate acute l., and small lilac fl., crowded towards the ends of the branches. Calyx small, minutely toothed. Corolla ½ in. long, tubular, with a spreading 4-lobed limb: the upper lobe bifid. Berries globose, bright blue. Chile.

Rhapis Kwanwortsik. (*Ill. H.* 1887, t. 13, misspelled.) Palmæ. S. A slender Palm, 4–5 ft. high with leafy stems. Petioles unarmed. L. palmately divided into 4–7 lanceolate segments. [*R. flabelliformis*, L'Hérit.] Japan.

Rhazya orientalis. (*H. G.* 1889, 221; *Gfl.* t. 1346.) Apocynaceæ. H. Resembling a *Vinca*, but with more erect stems, small shining l., and the fl. with a longer tube, varying from bright blue to dark violet. Taurus.

Rhipsalis aculeata. (*R. H.* 1892, 428.) Cactaceæ. S. succulent with trailing cylindric stems that are slightly 8–10-angled and clothed with tufts of slender white spines. Fl. small, whitish. Argentina.

Rhipsalis anceps. (*R. H.* 1892, 427.) S. succulent. A species with long narrow flat or rarely triangular stems crenulated on the margin and having yellowish white stems. [Syn. *Lepismium anceps*, Weber.] Brazil.

Rhipsalis capilliformis. (*R. H.* 1892, 425.) S. succulent. A dwarf compact-growing species, with much-branched stems; branches short and very numerous, all pendent, and forming a tuft-like growth. Fl. lateral or subterminal, white. Brazil.

Rhipsalis clavata. (*R. H.* 1892, 429.) S. Something in the way of *R. salicornioides*, but with pendent stems and white fl. [Syn. *Hariota clavata*, Hort.] Brazil.

Rhipsalis comorensis. (*R. H.* 1892, 424.) S. succulent, with drooping slender cylindric stems of a yellowish green and whorls of short branches; fl. small, greenish white. Comoro Isles.

Rhipsalis dissimilis. (*Gfl.* 1891, 634, f. 121.) S. succulent. This is the plant described in 1890 as *Lepismium dissimile*.

—— Var. **setulosa.** (*R. H.* 1892, 428.) S. A var. with 5-angled stems. [Syn. *R. setulosa*, Weber.] Brazil.

Rhipsalis gibberula. (*R. H.* 1892, 426.) S. A slender species with jointed dichotomous or whorled branches and numerous white fl. on the sides of the branches. The ovary immersed in the stem. Berries large, white. Brazil.

Rhipsalis gonocarpa. (*R. H.* 1892, 427.) S. Allied to *R. platycarpa*, with flat crenulated stems and white fl. about ½ in. in diam., with the ovary 4–5-winged. [Syn. *R. pterocarpa*, Weber.] Brazil.

Rhipsalis madagascariensis. (*R. H.* 1892, 424.) S. A much-branched species with trailing or drooping

6–10-angled stems about ¼ in. thick, with tufts of white hairs along the angles; fl. very numerous, greenish. Madagascar.

Rhipsalis penduliflora. (*G. C.* 1877, vii. 716.) S. succulent closely allied to *R. Saglionis*, differing in its pendulous habit, fastigiate quite terete branches, and pendulous fl. with more obtuse pet. Tropical America.

Rhipsalis pulvinigera. (*Gfl.* 1889, 182, f. 33, 34.) S. succulent similar to *R. floccosa*, with dark green terete branches having the areolæ in regular spirals and bearing small rounded rudimentary leaves or scales of a reddish brown; fl. white and yellowish green. Brazil.

Rhipsalis Regnellii. (*Gfl.* 1890, 118, f. 29, 31–3.) S. succulent very similar to *R. Houlletii*, with broad flat coarsely toothed branches, and small white fl. South Brazil.

Rhipsalis robusta. (*M. K.* 1896, 53.) S. species with stout terete branches; fl. produced near the tips of the stems. South Brazil.

Rhipsalis salicornioides bambusoides. (*R. H.* 1892, 429.) S. A very large form, growing to 6 ft. high, with rigid erect stems something like those of a Bamboo, and orange-yellow or reddish orange fl. Brazil.

Rhipsalis suareziana. (*R. H.* 1892, 425.) S. A much-branched trailing or drooping species with stems of two kinds, one long and slender, the other short; branches not verticillate; the young stems fusiform or 4–5-angled. Fl. small, lateral. Diego Suarez, Madagascar.

Rhipsalis tetragona. (*R. H.* 1892, 428.) S. A dwarf species with much-branched decumbent stems tetragonal or sometimes cylindric. Possibly the same as *R. prismatica*, but less robust.

Rhipsalis tucumanensis. (*R. H.* 1892, 426.) S. A rather large species, with stout trailing stems similar to those of *R. funalis*, cylindric or angular. Fl. solitary, of moderate size, white, tipped with rose, the ovary immersed in the stem. Argentina.

Rhipsalis virgata. (*R. H.* 1892, 425.) S. A species allied to *R. minutiflora* with cylindric much-branched drooping stems, ¼ in. thick. Fl. small, white, solitary or in pairs along the branches. Brazil.

Rhipsalis warmingiana. (*Gfl.* 1892, 8, f. 5–7.) S. succulent. A species with flat or 3–4-angled stems, and white fl. about ¾ in. in diam. Brazil.

Rhipsalis zanzibarica. (*R. H.* 1892, 425.) S. Very similar to *R. Cassytha*, of which it is, perhaps, only a robust form. Zanzibar.

Rhodea japonica aurea. (*R. H.* 1879, 220.) Liliaceæ. H. per. A handsome var. with the l. broadly striped with yellow.

Rhododendron albescens. (*Bull Cat.* 1887, 11.) Ericaceæ. G. Garden variety near *R. Gibsoni*.

Rhododendron apoanum. (*Gfl.* t. 1196.) G. shr. A small species with narrowly elliptic l., acute at both ends, green above, rusty beneath, and few-flowered trusses of small tubular red fl. about ½ in. long. Philippine Islands.

Rhododendron assamicum. (*Bull Cat.* 1881, 20.) G. A free-growing evergreen species with narrow lanceolate densely set l. Fl. 3 in. in diam., campanulate, with broad rounded white lobes, the upper with a cream-coloured stain at the base. [*R. formosum*, Wall.]

Rhododendron balsaminiflorum. (*Fl. and P.* 1882, 107.) G. or S. A garden hybrid of the *jasminiflorum-javanicum* type.

—— Var. **album.** (*Fl. and P.* 1882, 123; *Veitch Cat.* 1887, 12, f.) G.

—— Var. **aureum.** (*Fl. and P.* 1882, 123; *Veitch Cat.* 1887, 12, f.) G.

—— Var. **carneum.** (*Veitch Cat.* 1888, 12, f.) G.

Rhododendron brachycarpum. (*G. and F.* 1888, 292, f. 46.) H. shr., tall, wide-branching, resembling *R. catawbiense* in general appearance. L. oblong, obtuse, shortly mucronate, with a rusty silky pubescence beneath. Fl. numerous, 1½–1¾ in. in diam., in large terminal clusters, pale yellow or cream-colour. dotted with green at the base of the upper lobes of the corolla. Japan.

Rhododendron Championæ. (*G. C.* 1880, xiv. 694; *B. M.* t. 4609.) G. The fl. are about 4 in. in diam., white, tinged with yellow at the base, and dotted with ochre. Hong Kong.

Rhododendron ciliicalyx. (*Jard.* 1895, 51, f. 25.) G. Nearly allied to *R. reitchiannum*. Yunnan, China.

Rhododendron collettianum. (*B. M.* t. 7017; *G. C.* 1888, iii. 620; iv. 297, f. 38.) H. shr. L. oblong-lanceolate, acute at both ends, coriaceous, opaque green above, pale brownish lepidote beneath, 1½–3 in. long. Fl. nearly 1 in. long, funnel-shaped, with broadly oblong lobes, pure white, arranged in dense terminal umbels. Affghanistan.

Rhododendron Curtisii. (*Fl. and P.* 1883, 185; 1884, 113, t. 615.) G. [*R. multicolor*, Miq. var.]

Rhododendron Daviesii. (*F. M.* t. 474.) H. A garden hybrid with medium-sized oblong l., and moderately large trusses of somewhat tubular orange-red fl.

Rhododendron Falconeri × niveum. (*G. C.* 1896, xix. 702.) G. A garden hybrid between the two species indicated in the name.

Rhododendron Fordii. (*K. B.* 1894, 5; *G. and F.* 1894, 363.) G. Near *R. Fortunei*, with dark green obovate leathery l. 3 in. long and loose clusters of white fl. 2 in. in diameter. China.

Rhododendron forsterianum. (*Fl. and P.* 1882, 76.) G. Garden hybrid between *R. Veitchii* and *R. Edgeworthii*.

Rhododendron grande roseum. (*B. M.* t. 6948.) G. A var. with deep red fl. Sikkim.

Rhododendron graveolens. (*Bull Cat.* 1887, 11.) G. Garden hybrid.

Rhododendron halopeanum. (*R. H.* 1896, 359, 428, t.) G. A garden hybrid between *R. griffithianum* and *R. arboreum*.

Rhododendron indico-javanicum. (*G. C.* 1889, vi. 507, 602.) G. shr. A hybrid raised from *Azalea indica* and a form of *R. javanicum*.

Rhododendron intermedium. (*Nat. Arb. Zösch.* 1891, 20.) H. A natural hybrid between *R. ferrugineum* and *R. hirsutum*.

Rhododendron irroratum. (*B. M.* t. 7361.) G. Allied to *R. arboreum*. It forms a shrub 3 ft. or more high with robust stems, oblong lanceolate l. 3–4 in. long, and terminal heads of tubular fl. 1½ in. long, coloured creamy white, with a tinge of rose on the reflexed lobes. China.

Rhododendron jasminiflorum carminatum. (*Veitch Cat.* 1888, 13, f.) G. Garden hybrid.

—— Var. **roseum.** (*G. C.* 1894, xv. 720.) G. Differs from the type in having twice as many fl. in an umbel which are coloured soft carmine rose. Perak.

Rhododendron javanicum tubiflorum. (*B. M.* t. 6850.) G. shr. with elliptic oblong acute l. dotted beneath; and lax umbels of light orange-red fl. 2 in. in diam., with a slightly funnel-shaped lobe 1 in. or more long; calyx obsolete. Sumatra.

Rhododendron Keiskei. (*G. and F.* 1895, 23.) H. Allied to *R. dahuricum*, but dwarfer in habit; the l. ovate, 3 in. long; fl. in loose corymbs, 1 in. across, rose purple. Japan.

Rhododendron kewense. (*G. C.* 1888, iii. 620.) H. Garden hybrid between *R. griffithianum* and *R. Hookeri*.

Rhododendron Kochii. (*Gfl.* t. 1195.) G. shr. with petiolate oblong-lanceolate acuminate l., and lax trusses of white tubular fl. somewhat like those of *R. jasminiflorum*. Philippines.

Rhododendron ledifolium plenum purpureum. (*Gfl.* t. 1233, f. c–d; *R. H.* 1887, 143.) G. or H. Garden variety.

Rhododendron lepidotum obovatum. (*B. M.* t. 6450.) H. shr. with slender naked brown branchlets terminated by a tuft of obovate glaucous green l. covered with resinous scales as are also the peduncles, calyx, and ovary. Fl. solitary, on peduncles 2 in. long; calyx-lobes ovate, obtuse; corolla nearly rotate, 1 in. in diam., maroon-purple; anthers orange; ovary green. Sikkim.

Rhododendron Luscombei. (*G. C.* 1892, xi. 780.) H. A garden hybrid between *R. Fortunei* and *R. Thomsoni.*

—— Var. **splendens.** (*G. C.* 1896, xix. 702.) H. Differs from the type in having fl. of a rich crimson colour.

Rhododendron Maddeni longiflorum. (*G. C.* 1894, xv. 684.) G. Differs from the type in its longer thicker pedicels and funnel-shaped corolla 5 in. long, which is dull rose outside, pale bluish inside.

Rhododendron Manglesii. (*G. C.* 1885, xxiv. 48; *R. H.* 1885, 461; *Gfl.* 1886, 188.) G. A garden hybrid between *R. griffithianum* and *R. album elegans.*

Rhododendron multicolor. (*B. M.* t. 6769.) G. shr. with whorls of narrow-lanceolate acute l., 2–3 in. long, 4–7 lines broad, and small clusters of dark crimson or yellow campanulate fl. about 1 in. in diam. Sumatra.

Rhododendron niveum fulvum. (*B. M.* t. 6827.) G. var. with the under surface of the l. buff-coloured, the trusses larger and the fl. of a deeper purple colour. Sikkim.

Rhododendron nobilius. (*G. C.* 1896, xx. 765.) G. A garden hybrid between *R. Teysmannii* and *R. javanicum.*

Rhododendron Oldhami. (*G. C.* 1882, xvii. 524.) G. dwarf shr. densely covered with long brownish hairs. L. crowded beneath the fl., cuneate-lanceolate or oblong-lanceolate, acute or blunt and apiculate, the young ones covered with white silky scales. Fl. 2 in. in diam., funnel-shaped, reddish salmon. Formosa.

Rhododendron ovatum. (*Veitch Cat.* 1895, 10.) G. A dwarf species first introduced by Fortune in 1844, but afterwards lost. L. ovate, shining. 1½ in. long; fl. rose-purple, spotted with dark purple. [Syn. *Azalea ovata*, Lindl.; *B. M.* t. 5064.] North China.

Rhododendron parvifolium. (*Gfl.* t. 904.) H. shrub, erect, flexuously branched. L. ½–¾ in. long, oblong, acute, attenuate at the base, scaly on both sides, green above, rusty beneath. Fl. in small terminal compact umbels, pale rose: tube half as long as the 5-lobed sub-campanulate limb. Calyx small, 5-toothed. Stamens exserted, villous at the base. China, &c.

Rhododendron pendulum. (*G. C.* 1882, xvii. 429, f. 65.) G. shr. with elliptic-oblong obtuse ciliate l., and small trusses of white fl. Sikkim.

Rhododendron racemosum. (*G. C.* 1892, xi. 535; xii. 62, f. 9; *G. and F.* 1892, 222; *Gard.* 1892, xlii. 320, t. 878; *B. M.* t. 7301. H. A small Box-like shrub 6 in. high, with loose terminal heads of rose and white campanulate fl. nearly 1 in. across, and not unlike some of the forms of *R. parviflorum.* Yunnan, China.

Rhododendron roseum odoratum. (*R. H.* 1886, 315.) H. shrub of hybrid origin, with good-sized trusses of pale rose-coloured fragrant fl. of rather small size.

Rhododendron Salvini. (*Fl. and P.* 1880, 144.) H. A garden hybrid.

Rhododendron scabrifolium. (*G. C.* 1890, vii. 450; *B. M.* t. 7159.) G. An erect unbranched plant with scabrid hairy ovate acuminate l. 2½ in. long, and a compact head of fl., each 1½ in. across, white, tinted with rose. Yunnan, China.

Rhododendron Schlippenbachii. (*G. C.* 1894, xv. 469, f. 58; *Gard.* 1894, xlvi. t. 972; *B. M.* t. 7373.) G. A deciduous species related to *R. sinensis;* stems 5 ft. high, with large ovate l. 2–4 in. long, and rosy-lilac fl. 3 in. across. Corea, Manchuria and Japan.

Rhododendron serpyllifolium. (*G. C.* 1882, xvii. 429: *B. M.* t. 7503.) G. A low-growing bush with slender scaly branches, small obovate apiculate thinly hairy l., and terminal tufts of small white fl. [Syn. *Azalea serpyllifolia*, A. Gray.] Japan.

Rhododendron Smirnowi. (*Gfl.* t. 1226, f. 2, d–g; *G. C.* 1891, ix. 462; *B. M.* t. 7495.) H. shrub with obtuse l. 3½–4½ in. long, white-tomentose beneath, and clusters of purple fl. The very small calyx-lobes are as broad as long, and the stamens are shorter than the corolla and hairy at the base; ovary tomentose. Caucasus.

Rhododendron Taylori. (*Veitch Cat.* 1877, 26; *F. M.* t. 242.) G. Garden hybrid.

Rhododendron triflorum. (*G. C.* 1882, xviii. 44, 45, f. 9.) G. Shr. 4–6 ft. high, with oblong acute shortly-stalked l. glaucous and thickly beset

with rust-coloured scales beneath, and 3-flowered umbels of greenish yellow fl., 2 in. in diam. Sikkim Himalaya.

Rhododendron Ungerni. (*Gfl.* t. 1226, f. 1, a–c.) H. shrub with obtuse apiculate l. 4–6 in. long by 2–2½ in. broad, and clusters of white fl. often tinted with red outside. Stamens hairy in the middle. Calyx-lobes ¼ in. long, narrow lanceolate. Caucasus.

Rhododendron Vaseyi. (*G. and F.* 1888, 376, f. 60; *G. C.* 1888, iv. 569; 1896, xx. 71, f.) H. shr. growing to 15–18 ft. in height, but flowering freely when only 1 ft. high. L. oblanceolate, acute, cuneate at the base, 2½–3 in. long, not expanded when flowering. Fl. in lax umbels, bright clear pink, dotted with darker pink at the base of the upper lobes of the corolla, which is about 1½ in. in expanse. Carolina.

Rhododendron victorianum. (*G. C.* 1887, i. 387.) Garden hybrid.

Rhododendron Williamsii. (*Williams' Cat.* 1885, 9.) G. or H. A garden hybrid between a *Rhododendron* and *Azalea sinensis*.

Rhododendron yedoense. (*Gfl.* t. 1233, f. a–b.) H. shr. The l. first produced are lanceolate, shortly acuminate, with adpressed hairs; the autumnal l. are smaller, linear-spathulate, broadly petiolate, deep green. Umbels 3-flowered: calyx-lobes linear-oblong, acute, serrate, setose; corolla funnel-shaped, rose-pink. Japan.

Rhodostachys andina. (*R. H.* 1885, 540, f. 95, t.) Bromeliaceæ. G. Better known as *Bromelia longifolia* and *B. carnea*. Chile.

Rhodostachys pitcairniæfolia kirchhoffiana. (*Gfl.* t. 1325.) G. Bromeliad with numerous narrow channelled green l., the inner ones reddish at their base inside, surrounding a dense sessile head of blue fl. It differs from the type in being smaller, more slender, and with the bracts smooth within. Chile.

Rhopala Poortmanni. (*G. C.* 1883, xix. 693.) Proteaceæ. S. shr. with variable foliage, covered with a reddish brown tomentum, and spikes of red fl. [*Roupala*.]

Rhopaloblaste hexandra. (*W. G.* 1890, 399; *Bull Cat.* 1890, 7, f.) Palmæ. S. Palm with unarmed slender stem, and regularly pinnate l., having small linear acute leaflets. [*Cyrtostachys ceramica*, H. Wendl.; syn. *Bentinckia ceramica*, H. Wendl.]

Rhus Cotinus pendula. (*R. H.* 1885, 554.) Anacardiaceæ. H. shr. with drooping branches. Garden variety.

Rhus Michauxii. (*G. and F.* 1895, 404, f. 55.) H. A shrub with erect stems 2–3 ft. high, spreading extensively by underground stolons; l. pinnate. Fruit in pyramidal panicles, bright scarlet, clothed with close silky pubescence. Southern United States.

Rhynchanthus longiflorus. (*B. M.* t. 6861.) Scitamineæ. S. per. of botanical interest. Rootstock tuberous. Stem 18 in. high, with 10–12 distichous lanceolate acuminate green l. 6–8 in. long, 1½ in. broad. Spike few-flowered, very lax; bracts 1 in. long, reddish. Fl. yellow, with green-tipped lobes, the lip reduced to a mere point at the base of the stout boat-shaped filament. Burma.

Rhynchocarpa glomerata. (*G. C.* 1880, xiv. 819.) Cucurbitaceæ. G. or H. H. A climbing tuberous per. under glass. annual in a warm border. L. palmately cut into about 5 linear-lanceolate segments. Fl. inconspicuous, male in racemes, female in clusters. Fr. about as large as a hazel nut, ovate, pointed. Brazil.

Ribes alpinum aureum. (*G. C.* 1881, xvi. 333, f. 61.) Saxifragaceæ. H. shr. A dwarf form with yellow leaves.

Ribes integrifolium. (*Gfl.* t. 1047, f. 6.) H. shr. with oblong-lanceolate serrate acute l. and rather short racemes of small greenish yellow bracteate fl. Chile.

Ribes japonicum. (*B. H.* 1877, 436.) H. shrub, with divaricate branches. persistent trilobed denticulate-crenate strongly nerved l., and small glomerulate greenish fl. Fr. nearly globose, the size of a small cherry, cherry-red. Japan.

Ribes Lobbii. (*G. C.* 1883, xix. 11, f. 1.) H. spring-flowering shr. glandular-pubescent, with trifid spines at the base of the tufts of the three-lobed

and toothed l. Peduncles 2–3-flowered; fl. pendent, ¾ in. long, Fuchsia-like in shape, dull purple; sepals green-tipped. California.

Ribes Roezlii. (*Gfl.* t. 982, f. 1–3.) H. shr. allied to *R. Menziesii*. Branches armed with trifid spines at the nodes. L. roundish, sub-cordate, lobed. Fl. solitary or in pairs, pendulous; calyx-lobes lanceolate, revolute, red; petals linear, truncate, not spreading, white. North West America.

Ribes succirubrum. (*M. G. Z.* 1896, 299.) H. A hybrid between *R. divaricatum* and *R. niveum*.

Richardia aurata. (*Gard.* 1892, xlii. 529.) Araceæ. G. This, said to be a garden hybrid between *R. hastata* and *R. maculata*, is described as having spotted l. and large yellow spathes similar to those of *R. elliottiana*. [*R. hastata*, Hook. var.]

Richardia elliottiana. (*W. G.* 1890, 277; *G. C.* 1892, xii. 123; *B. M.* t. 7577.) G. A yellow-spathed species with spotted l. South Africa.

Richardia Lutwychei. (*G. C.* 1893, xiii. 568.) G. Known also as "Pride of the Congo." [*R. hastata*, Hook.]

Richardia Pentlandi. (*G. C.* 1892, xi. 816; *B. M.* t. 7397.) G. A distinct species with the robustness of *R. africana* and large spathes of a rich yellow colour. South Africa.

Richardia Rehmanni. (*G. C.* 1893, xiv. 564, 659, 770; *B. M.* t. 7436.) G. Peculiar in having lanceolate leaf-blades and spathes more or less tinged with rose-purple. South Africa.

Ricinus cambodgensis. (*Gfl.* 1887, 102.) Euphorbiaceæ. H. H. Probably a form of *R. communis*, with large l. and blackish stem and branches.

Ricinus zanzibarensis. (*Gfl.* 1894, 75, f. 20.) Seeds much larger and different in shape from those of *R. communis*. The l. are bright green with whitish veins. East Tropical Africa.

Robinia decaisneana rubra. (*R. H.* 1890, 275; *W. G.* 1890, 291.) Leguminosæ. H. tree. A seedling form with rose-coloured fl.

Robinia neomexicana. (*Gfl.* 1891, 362.) H. Near *R. Pseud-acacia*; with small glaucous l. and red fl.

—— Var. **luxurians.** (*G. C.* 1892, xii. 669.) H. A var. growing to a greater height than the type and with compound racemes. Flowering sometimes twice a year. Southern Rocky Mountains.

Robinia Pseud-acacia angustifolia. (*R. H.* 1889, 420.) H. tree. Garden variety.

—— Var. **bessoniana.** (*R. H.* 1878, 140.) H. A var. with short stout branches, very little ramified, collected in a rounded compact head.

Rodriguezia Bungerothi. (*L.* iii. t. 127; *G. C.* 1888, iii. 264, 561; *O.* 1888, 163.) Orchidaceæ. S. Much in the way of *R. secunda*. Pseudobulbs 1½ in. long, compressed, oblong. L. 2–3, strap-shaped, acute, 5–6 in. long by 1 in. broad. Fl. in a dense raceme, bright carmine-rose according to the plate, purplish according to description. Sep. and pet. elliptic-ovate. Lip cuneate-obovate, emarginate. Spur rather stout, solid at the base. Venezuela.

Rodriguezia caloplectron. (*G. C.* 1883, xix. 368; *Gfl.* t. 1372.) S. A curious species, with oblong two-edged pseudobulbs, bearing solitary thick lanceolate l. and pendulous few-flowered racemes. Fl. twisted, yellowish white; sep. and pet. oblong, emarginate or obtuse; the lateral sep. forming a long compressed horn-like acute body, enwrapping the solid acute spur of the nearly square emarginate lip. Colombia.

Rodriguezia Fuerstenbergii. (*G. C.* 1890, viii. 746.) S. Allied to *R. leeana*. Pseudobulbs and l. small; raceme 1 ft. long, 3-flowered; fl. 2 in. long and more than 1 in. broad; sepals rose-coloured; pet. and lip white, blotched with yellow.

Rodriguezia leeana. (*G. C.* 1883, xx. 38.) S. A large-flowered species, with linear-ligulate acute l. 1 ft. long, and racemes of large white fl., with a yellow middle line on the sep. and pet., and two yellow four-branched keels on the lip.

—— Var. **picta.** (*G. C.* 1885, xxiii. 692.) S. A var. covered with numerous mauve-purple lines and spots.

Rodriguezia Lehmanni. (*G. C.* 1883, xix. 403.) S. Allied to *R. caloplectron*, but of larger growth, with smaller whitish ochre fl. washed with brown, the lateral sep. with green keels, the lip with a yellow disk and brown spots. Colombia.

Rodriguezia Lindeni. (*J. O.* 1892, 10, f. 1.) S. [*R. pubescens*, Reichb. f.]

Rodriguezia luteola. (*G. C.* 1883, xix. 688.) S. A neat species with 6–9-flowered racemes of small yellowish fl. having all the parts of the fl. connivent.

Rogiera cordata. (*R. H.* 1878, 200.) Rubiaceæ. G. or S. shrub with opposite sub-sessile ovate-lanceolate acute l., sub-cordate at base, and largish terminal corymbose cymes of small white fl. [*Rondeletia cordata*, Benth.] Guatemala.

Romulea Macowani. (*G. C.* 1887, i. 184, f. 42.) Iridaceæ. G. Bulb with linear curved l., and crocus-like fl., 1–1½ in. in diam., which are bright golden yellow in the lower part, lighter upwards, and often tinged with red at the tips. South Africa.

Rondeletia Backhousii. (*B. M.* t. 6290.) Rubiaceæ. S. shrub, very handsome and free-flowering, glabrous except the pedicels, calyx and corolla-tube, which are minutely pubescent. L. opposite, 4–9 in. long, shortly petioled, ovate, acute, membranous, green, with red petioles and veins beneath. Intl. of large terminal lax trichotomously branched panicles. Calyx-lobes lanceolate, acute, reddish, erect, becoming brownish and spreading after the corolla has fallen. Corolla-tube slender, twice as long as the calyx-lobes; limb rotate, pink. ⅓ in. in diameter. Tropical America.

Rondeletia odorata breviflora. (*B. M.* t. 6350.) S. A figure and description of the plant known in gardens as *Rondeletia speciosa*.

Ronnbergia columbiana. (*B. H.* 1885, 82.) Bromeliaceæ. S. Bromeliad with a rosette of very coriaceous arched wavy smooth l. of a dark green above, violet-brown beneath, bordered with small teeth. Fl.-stem 1 ft. high, with membranous brownish bracts, and a short spike of hypocrateriform dark blue fl., with a white tube. Colombia.

Ronnbergia morreniana. (*Lind. Cat.* 1879, 12.) S. L. large oval of a clear green marked with large blackish green spots. Spikes of fl. blue. Figured at *Ill. H.* 1874, t. 177. Tropical America.

Rosa alba suaveolens. (*H. G.* 1888, 561.) Rosaceæ. H. No description. One of the kinds yielding Attar of Roses. Eastern Roumelia.

Rosa beggeriana. (*G. and F.* 1888, 333.) H. shr., 4–6 ft. high, flowering all the summer. Branches slender, with a few recurved spines and no prickles. L. with 3–4 pairs of small elliptic serrate leaflets. Fl. small, white, in several-flowered corymbs. Fruit not much larger than a pea, at first orange-red, deep purple-black when ripe. Central Asia.

Rosa byzantina. (*H. G.* 1888, 561.) H. No description. Yields Attar of Roses. Eastern Europe, &c.

Rosa canina Hetscholdi. (*Gfl.* 1889, 240.) H. Seedling variety with peculiarly cut l.

Rosa centifolia pæstumense. (*B. T. O.* 1895, 165.) H. A var. with double or semi-double clear rose-coloured fl.

Rosa Ecæ. (*G. C.* 1885, xxiv. 468; *Icones Plantarum* t. 1329.) H. A distinct species with small l. having about seven leaflets, red shoots, broad-based prickles, and small yellow fl. [*R. xanthina*, Lindl.] Affghanistan.

Rosa Engelmanni. (*G. and F.* 1889, 376, f. 121.) H. A species with oblong fruit, like that of *R. alpina*, to which it is nearly allied. Colorado.

Rosa Fendleri. (*H. G.* 1888, 560.) H. Resembling *R. blanda*, and probably only a form of that species. New Mexico.

Rosa gallica Conditorum. (*Nat. Arb. Zösch.* 1889–1890, 16.) H. A var. from which perfume is obtained in Asia Minor.

Rosa gallica trigintipetala. (*H. G.* 1888, 561; *G. C.* 1890, vii. 45, f. 8.) H. No description. Yields Attar of Roses. Eastern Roumelia.

Rosa gigantea. (*G. C.* 1888, iv. 122, 1889, vi. 13, f. 4; *G. and F.* 1888, 321; *Gfl.* 1888, 516.) G. Something in the way of *R. chinensis*, but larger, and differing in having solitary white fl. 5 in. in diam., with entire outer sep. and unarmed floral branches. Burma.

Rosa glutinosa yarmalensis. (*G. C.* 1892, xii. 669.) H. Said to be a very neat small-leaved var. not much higher than 2½ ft., characterised by its strong uncinate spines, very similar to those of *R. Seraphini*, and a comparatively large fl. of a whitish red colour. Asia Minor.

Rosa Godefroyæ. (*R. H.* 1886, 261.) H. Rose, forming a compact bush, glabrous in all parts; the l. with 5–7 leaflets shining dark green; sep. longer than the buds; fl. large, white, with numerous pet. Persia, probably a garden variety.

Rosa humilis triloba. (*G. and F.* 1889, 76, f. 93.) H. A curious form of this North American species in which the pet. are distinctly trilobed.

Rosa minutifolia. (*G. and F.* 1888, 102, f. 22.) H. A Rose of compact much branched habit, armed with numerous straight spines, with very small l. of 5–7 deeply-toothed leaflets, and small solitary pink or white fl. on short spurs along the branches. California.

Rosa nutkana. (*G. and F.* 1888, 449, f. 70.) H. of stout habit, with rather broad foliage: usually armed at the base of the l. with broad flat spines, and occasionally with scattered prickles. L. glabrous or pubescent. Fl. large in lax corymbs, peduncles and ovaries smooth, unarmed. Fr. globose, ½ in. diam., bright scarlet. North-west America.

Rosa phœnicea. (*H. G.* 1888, 560.) H. Rose with climbing stems, armed with scattered hooked prickles, pinnate l. with 3–5 elliptic obtuse coarsely-toothed leaflets, and corymbose panicles of white fl. Syria.

Rosa pisocarpa. (*B. M.* t. 6857.) H. A species with reddish glabrous stems armed with straight prickles. L. rather small, with five leaflets. Fl. 2–3 together, bright pink, about 1 in. in diam. Fr. globose, reddish, ⅓–½ in. in diam. North California.

Rosa Pissardi. (*R. H.* 1880, 314. f. 62, 63.) H. 15–18 ft. high, with l. and fl. like those of the Dog-Rose. Caspian Sea.

Rosa platyphylla. (*R. H.* 1886, 436.) H. A broad-leaved form of *R. multiflora*.

Rosa rugosa calocarpa. (*R. H.* 1891, 129, f. 35: 1895, 446, f. 148-9.) H. A garden hybrid between *R. indica* and *R. rugosa*.

—— Var. **fimbriata.** (*R. H.* 1890, 427, f. 131.) H. Garden hybrid.

Rosa wichuraiana. (*G. and F.* 1891, 569, f. 89.) H. shr. with dark glossy green l. and white fl. Japan.

Rosanowia ornata. (*Fl. des S.* t. 2423–4; *Fl. and P.* 1882, 53.) Gesneraceæ. S. Garden hybrid between *R. conspicua* and a red *Gloxinia*.

Roscœa purpurea sikkimensis. (*G. C.* 1890, viii. 221.) Scitamineæ. H. H. Supposed to differ from the type in the stem and roots and also in the shade of purple of the fl. India.

Roydsia suaveolens. (*B. M.* t. 6881.) Capparidaceæ. S. A free-flowering and sweet-scented shrub. L. 4–12 in. long, oblong or oblong-lanceolate, acute, bright green. Racemes 3–6 in. long, erect. Fl. ½ in. in diam.; calyx dull reddish; corolla none; stamens numerous, yellow; ovary on a short stalk, yellowish. India.

Rubus cæsius turkestanicus. (*Gfl.* 1892, 106, f. 25.) Rosaceæ. H. Bramble with small and very narrow pet., and elongate berries of good flavour. Turkestan.

Rubus japonicus tricolor. (*G. C.* 1894, xvi. 96. f. 15.) H. A slender-growing trailer with stems and leaf-stalks of rose-colour; young l. pink; older l. variegated with white.

Rubus melanolasius. (*Späth Cat.* 1894–5; *N. G. M.* 1894, 177.) H. A species similar to the Raspberry. North-west America.

Rubus Millspaughi. (*W. G.* 1892, 216.) H. A spineless bramble with edible fruit. North America.

Rubus phœnicolasius. (*B. M.* t. 6479.) H. A climbing Bramble allied to the common Raspberry. Stem, petioles, pedicels, and calyx-segments clothed with long purple glandular hairs. L. trifoliolate. Leaflets ovate, acute, serrate, green above, white beneath. Fl. racemose. Pet. pale pink, small, about ⅓ as long as the calyx-segments. Japan.

Rubus trifidus. (*G. and F.* 1888, 273.) H. shr. of robust habit, with semi-erect stems, large deeply-divided l., and clusters of showy rose-coloured fl. Japan.

Rubus ursinus. (*H. G.* 1888, 561.) H. Stems rather weak and trailing, armed with rather slender prickles. L. with 3. or rarely 5, ovate or elliptic variously toothed more or less tomentose leaflets. Fl. white, in small corymbs. Fr. black. California.

Rubus xanthocarpus. (*Gfl.* 1892, 108.) H. Bramble of dwarf habit, 8–15 in. high, with white fl. solitary or in pairs in the axils of the upper l., succeeded by yellow fr. North China.

Ruellia acutangula. (*B. M.* t. 6382.) Acanthaceæ. S. herb of large size. L. 5–8 in. long, elliptic-ovate, acuminate, narrowed into the petiole, green. Fl. sessile in dichotomously branched cymes, bright scarlet, with a yellow throat: tube 1 in. long; limb 1½ in. in diameter, with sub-equal lobes. Brazil.

Ruellia devosiana. (*B. H.* 1877, 344, t. 19.) S. herb. foliage plant, with purple stems, lanceolate distantly toothed l. of a deep green above, with the course of the veins whitish, entirely purple beneath, and with axillary white fl. Corolla-tube suddenly dilated and bent at the middle, the upper and larger part making nearly a right angle with the lower very narrow part; limb spreading, regular, 5-lobed, ½ in. in diam. Brazil.

—— Var. **grilliana.** (*B. T. O.* 1888, 332.) S. Garden variety.

Ruellia macrantha. (*Williams' Cat.* 1883, 28; *R. H.* 1881, 410, t.) S. plant with long lanceolate l. and large axillary trumpet-shaped fl. of a rosy purple, with a light beautifully veined throat. Brazil.

Ruellia makoyana. (*R. H. B.* 1895, 109, t.) S. L. olive green, shaded with violet and veined with white on the upper surface; under surface vinous purple; fl. large, carmine-rose. Brazil.

Ruellia Portellæ. (*B. M.* t. 6498.) S. L. elliptic-ovate, acute, dark green with pale veins. Fl. solitary, axillary, bright rose-pink. Corolla-tube long, slender, rather suddenly curved near the top. Limb 1 in. in diam., with 5 sub-equal bifid lobes. South Brazil.

Ruellia rosea. (*Bull Cat.* 1878, 8.) S. per. Stems bluntly 4-angled. L. opposite, oblong-elliptic. Fl. bright rosy pink or mauve, in axillary 4–6-flowered cymes; corolla-tube 1½ in. long; limb spreading, 1½ in. in diam., 5-lobed; lobes roundish, emarginate.

Sabal blackburniana nobilis. (*H. G.* 1888, 240.) Palmæ. S. No description.

Saccia elegans. (*R. H.* 1889, 35; *W. G.* 1889, 112.) Convolvulaceæ. S. Shr. of compact habit, growing to 5 or 6 ft. high, with axillary clusters of lilac fl. towards the ends of the branches. Cochabamba, Bolivia.

Saccolabium Barbeyæ. (*B. H.* 1896, 40.) Orchidaceæ. S. [*Angræcum imbricatum*, Lindl.]

Saccolabium bellino - bigibbum. (*O. R.* 1895, 38.) S. A natural hybrid between the species indicated in the name. Burma.

Saccolabium bellinum. (*G. C.* 1884, xxi. 174; *W. O. A.* t. 156.) S. In the way of *S. calceolare*, but larger. Sep. and pet. straw-yellow, with large brown blotches; lip white, with mauve-purple blotches. Burma.

Saccolabium Berkeleyi. (*G. C.* 1883, xix. 814.) S. In the way of *S. littorale* and *S. guttulatum*, with the premorse l. of the first, and the short internally puberulous spur of the last, and an acute lobed lip. Fl. white, with amethyst spots.

Saccolabium bivittatum. (*Gfl.* 1890, 607; *Acta Hort. Petrop.* 1890, xi. 309.) S. Allied to *S. paniculatum*, with strap-shaped leathery l. and a lax drooping spike of small fl., sep. and pet. yellowish, marked with two purple-brown stripes; lip white, nearly as long as the sep. East Indies.

Saccolabium Blumei russellianum. (*W. O. A.* t. 238.) S. A fine form with long dense pendulous racemes of white fl. spotted with mauve-purple on the sep. and pet. and having a mauve-purple lip with a white apex. [*Rhynchostylis retusa*, Blume, var.]

Saccolabium borneense. (*G. C.* 1881, xv. 563.) S. L. broad, short, unequally bilobed; fl. ochre-cinnamon-coloured, in a nodding dense raceme. Borneo.

Saccolabium calopterum. (*G. C.* 1882, xviii. 520.) S. No evidence is given of its being in cultivation. New Guinea.

Saccolabium cerinum. (*G. C.* 1888, iv. 206.) S. A rather curious species, with dark oblong bilobed l. and racemes of numerous ascending waxy orange fl. with an apricot-coloured spur. Sunda Isles.

Saccolabium cœleste. (*G. C.* 1885, xxiii. 692; *W. O. A.* t. 361.) S. Spike 3–4 in. long. Fl. whitish, with the front part of the lip and the tips of the sep. and pet. bright sky-blue and with a blue tint on both sides of the recurved spur. [*Rhynchostylis cœlestis*, Reichb. f.]

Saccolabium flexum. (*G. C.* 1882, xviii. 520.) S. No evidence is given of its being in cultivation. New Guinea.

Saccolabium fragrans. (*G. C.* 1882, xviii. 134.) S. A small species with a few oblong acute l. full of rugosities and depressions and with rich racemes of numerous white fl. with the lip and the tips of the sep. and pet. mauve-purple. Strongly scented like violets. Burma.

Saccolabium giganteum illustre. (*G. C.* 1884, xxi. 44; *Ill. H.* 1884, t. 517; *L.* ii. t. 83.) S. A var. with a larger raceme of larger and less crowded fl. having the purple spots on the sep. and pet. darker and the purple of the lip brighter than in the type.

—— Var. **petotianum.** (*G. C.* 1886, xxiv. 746.) S. A var. with large rigid fl. of dull white. Cochin China.

—— Var. **Regnieri.** (*R. H.* 1889, 232.) S. A var. with fl. measuring 1½ in. in diameter. Cambodia.

Saccolabium Græffei. (*G. C.* 1881, xvi. 716.) S. L. broad, ligulate, bilobed; fl. in a fine spike, conspicuous, deep purple. Spur cylindric, blunt and constricted; blade of lip short, 3-toothed, with a transverse lamella in front of the base of the middle lobe. Fiji.

Saccolabium gurwalicum. (*G. C.* 1879, xii. 102.) S. In the way of *S. guttatum*, but only half the size, and with a porrect lip. Fl. white with an amethyst-coloured lip and some blotches of the same colour on the sep. and pet. Spur hairy inside. [*Rhynchostylis retusa*, Blume.] India.

Saccolabium hainanense. (*K. B.* 1895, 284.) S. Allied to *S. gemmatum*. Stem 6 in. long. L. lanceolate, linear, 2½ in. long; panicle 6 in. long; fl. numerous, small, white and purple. Hainan.

Saccolabium longicalcaratum. (*K. B.* 1894, 186.) S. Allied to *S. compressum*. Stem short; l. 4 in. long, 1½ in. wide; raceme 6 in. long, many-flowered; fl. small, pinkish purple. Burma.

Saccolabium miniatum citrinum. (*G. C.* 1884, xxi. 542.) S. A fine var. with rich dense infl. of lemon-coloured fl. with a dark centre. Philippines.

Saccolabium Mimus. (*G. C.* 1878, ix. 266.) S. Of dwarf habit, with one-sided racemes of rose-purple fl. with the tips of the sep., pet. and lip green. South Sea Islands.

Saccolabium mooreanum. (*K. B.* 1893, 64; *B. M.* t. 7428.) S. Allied to *S. Mimus*. L. 6 in. long, 1½ in. wide; scape 8 in. long; fl. small, in a crowded short raceme, pink with green tips. New Guinea.

Saccolabium Pechei. (*G. C.* 1887, i. 447.) S. L. 7 in. long, 2 in. broad, oblong, obtusely bilobed. Raceme few-flowered; fl. as large as those of *S. bellinum*. Sep. and pet. cuneate-oblong, subacute, ochraceous with red spots. Lip with a cupular spur, retuse side lobes and a transversely triangular front lobe; the base yellow with a few red spots; the front lobe whitish. Moulmein, Burma.

Saccolabium smeeanum. (*G. C.* 1887, ii. 214.) S. L. very thick, with acute edges, obtuse and unequally 2-lobed at the apex. Racemes dense. Fl. small,

whitish, with mauve mid-veins to the sep. and pet., and a mauve disk to the white lip, which latter fades to yellow and brown, the sep. and pet. fading to whitish ochre with brownish mauve stripes. Sep. and pet. oblong. Side lobes of lip very small, oblong: mid-lobe oblong, acute, with a swelling under the apex. Spur short, cylindric.

Saccolabium violaceum harrisonianum. (*F. O.* 4. t. 236.) S. A form with pure white deliciously fragrant flowers. Figured at *B. M.* t. 5433 under the name of *S. harrisonianum*. Philippines.

Saccolabium witteanum. (*G. C.* 1883, xx. 618.) S. In general appearance this resembles *Sarcanthus densiflorus*. L. cuneate-oblong, toothed at the apex, 2 ft. or more long; raceme elongate, lax; sep. and pet. orange with reddish spots; lip white, with some purple marks and a green apex to the spur, the mouth of which is covered by 3 teeth. Java.

Sadleria cyatheoides. (*Bull Cat.* 1877, 7, t. 7; *Fl. and P.* 1878, 3.) Filices. S. tree-fern of dwarf habit, with large elegant fronds, 4–6 ft. long; pinnæ 8–12 in. long, ¾ in. broad, pinnatisect; pinnules linear. Stipes erect; lamina spreading in a graceful horizontally curved manner. Sandwich Islands.

Sagenia irregularis. (*Williams' Cat.* 1883, 28.) Filices. S. fern with erect caudex and fronds 3 ft. or more long. Stipes, rhachis and midrib black, shining. Fronds triangular, bipinnate; lower pinnæ stalked, most developed on the lower side; apex of the lower pinnæ and frond acuminate, deeply lobed on the margin: the ultimate lobes all large, the longer lower ones being again lobed and acuminate, the upper shorter ones more obtuse. [*Nephrodium irregulare*, Baker.] Polynesia.

Sagenia lawrenceana. (*G. C.* 1881; xv. 9.) S. Caudex short, 3–4 in. high. fronds gracefully arching, 2 ft. or more long, ovate in outline, pinnate below, pinnatifid above: pinnæ falcate, pinnatifid, the lower ones about 18 in. long; stipes, rhachis, and costa beneath, black and glossy. [*Nephrodium lawrenceanum*, Baker.] Madagascar.

Sagenia mamillosa. (*G. C.* 1886, xxvi. 38: *Ill. H.* 1886, t. 598.) S. A distinct and handsome fern with oblanceolate entire and pinnatisect fronds 1–2 ft. long. The lobes of the pinnatisect fronds are 4–6 on each side, lanceolate, acute, entire. Sori copious, orange-coloured, seated in deep cavities which project as pointed tubercles on the upper surface. [*Nephrodium mamillosum*, Baker.] Moluccas.

Sagittaria montevidensis. (*B. M.* t. 6735.) Alismaceæ. S. Aquatic with sagittate l. and a tall scape with lax whorls of large white fl. with a crimson spot at the base of each pet. The scapes bearing the female fl. are much stouter and the pedicels shorter than those of the male ones. South America.

Saintpaulia ionantha. (*Gfl.* t. 1391; *B. M.* t. 7408.) Gesneraceæ. S. Habit of *Ramondia pyrenaica*. Fl. dark violet-blue with yellow anthers. Usumbara Mountains, East Africa.

Salix amplexicaulis. (*Gfl.* 1893, 674, f. 136.) Salicaceæ. H. [*S. purpurea*, Linn. var. *amplexicaulis*, Boiss.] Morea.

Salix balsamifera. (*G. and F.* 1888, 246.) H. shr. 4–10 ft. high. L. 2–3 in. long, 1–1½ in. broad, acute or acuminate, broadly rounded or subcordate at the base, of a rich reddish colour when young, becoming dark green above, paler or glaucous beneath, glabrous. Catkins dense, 1–1½ in. long; male very silky, with rosy scales; female less silky, becoming very lax in fruit, 2 in. or more long; fruit beaked, on long pedicels. Eastern North America.

Salix basfordiana. (*G. C.* 1882, xvii. 298, f. 41 2.) H. willow with brilliant orange bark passing into red on the terminal twigs. L. long, narrow, lanceolate, acuminate, serrate. Male catkins 2½ in. long, yellow; female catkins 1½ in. long. The female tree is also known as *S. sanguinea*. [*S. fragilis*, Linn. var. *basfordiana*, Hort.]

Salix blanda. (*Gfl.* 1893, 378.) H. A hybrid between *S. babylonica* and *S. fragilis*.

Salix californica. (*Gfl.* 1887, 606, 644.) H. A var. of *S. repens*.

Salix chlorophylla. (*G. and F.* 1888, 154.) H. Alpine Willow forming a low spreading bush a few inches high. L. oblong-lanceolate or obovate-oblong, entire, bright green, silky beneath. Catkins dense. Fr. tomentose. North America.

Salix hoyeriana. (*Nat. Arb. Zösch.* 1889–90, 17; *Gfl.* 1891, 332.) H. A handsome Weeping-Willow, with broad elliptic l. 4 in. long by 2 in. broad. Cascade Mountains, British Columbia.

Salix humboldtiana. (*G. C.* 1883, xix. 693.) G. tree of pyramidal habit, something like the Lombardy Poplar. Andes.

—— Var. **fastigiata.** (*R. H.* 1896, 177, f. 58–60.) G. A form of pyramidal habit resembling that of the Lombardy Poplar. Peru, &c.

Salix lasiandra lancifolia. (*Gfl.* 1887, 410, 409, f. 98.) H. L. lanceolate, acuminate, 6–10 in. long, finely serrate on the margin; stipules reniform; catkins greenish yellow, about 2 in. long, on short lateral shoots. California.

Salix Nicholsoni purpurascens. (*Nat. Arb. Zösch.* 1889–90, 18.) H. shr. resembling the purple Peach. L. purple when young. [Probably a natural hybrid between *S. nigra*, Marsh. and *S. myricoides*, Hort.]

Salix nigricans moabitica. (*Gfl.* 1893, 378.) H. A dwarf form of the black willow with finely fringed l.

Salix purpurea amplexicaulis. (*G. C.* 1891, ix. 462.) [Syn. *S. amplexicaulis*, Bory & Chaub.] Orient.

—— Var. **scharfenbergensis.** (*Gfl.* 1893, 378.) H. Form of the common purple willow.

Salix vitellina britzensis. (*B. H.* 1879, 270.) H. An ornamental var. with the young shoots of a bright red. [*S. alba*, Linn. var. *britzensis*, Späth.]

Salmia laucheana. (*G. C.* 1893, xiii. 442, 481, f. 72.) Cyclanthaceæ. S. This species is near *Carludovica plicata*. It has large ensiform plicated coriaceous green l. with bilobed apices and sheathing bases. [*Carludovica laucheana*, Hort.] Antioquia, Colombia.

Salvia Bethellii. (*G. C.* 1881, xv. 51. 49, f. 10; *F. M.* t. 464.) Labiatæ. G. herb. per. Seedling var. of *S. involucrata*, with large cordate ovate l.; the branches terminating in large whorled spikes of bright crimson fl. In bud each whorl is surrounded by a pair of large coloured bracts.

Salvia cœlestina. (*R. H.* 1878, 49.) G. Per. of robust habit, whitish green or canescent. L. petiolate. oval-elliptic, shortly and broadly rounded at the base, attenuate at the apex; margin irregularly toothed. Fl. soft lilac-blue, very numerous. Mexico (?).

Salvia Columbariæ. (*B. M.* t. 6595.) H. annual, ¾ to 2 ft. high. L. radical, long-petioled, oblong, pinnatifid, wrinkled. Fl.-whorls one or two at the ends of the branches. Corolla bright blue. California.

Salvia flocculosa verticillata pauciflora. (*B. T. O.* 1890, 268.) G. A shrubby plant with bright green lanceolate-ovate l. thin and rugulose. Fl. in terminal spikes of rich red colour, with two white spots on the upper lip. Andes of Quito.

Salvia Greggii. (*B. M.* t. 6812.) G. species with narrow cuneately oblong obtuse l. and terminal racemes of showy fl.; corolla light carmine, with a deep carmine lower lip. New Mexico. &c.

Salvia Hoveyi. (*G. C.* 1880, xiv. 695.) G. This is said to be a sport of *S. splendens*, which it resembles, but the fl. are deep puce-purple, the calyces being blackish purple; it is also said to be identical with *S. ianthina*.

Salvia macrostachya. (*G. and F.* 1894, 114; *B. M.* t. 7372.) G. A stout-growing herb with quadrangular stems 6 ft. high, large cordate green l. and terminal spikes, 6 in. long, of blue fl. over 1 in. long. Ecuador.

Salvia mexicana minor. (*G. C.* 1883, xix. 341, f. 49.) H. H. herb. per. with ovate-lanceolate l., hoary beneath, and 6–8-flowered whorls of blackish violet fl. with the corolla-tube not longer than the calyx. [*S. discolor*, H. B. & K.: *B. M.* t. 6772.] Mexico.

Salvia officinalis aurea. (*R. H.* 1879, 240.) H. A dwarf compact form of the common sage with yellow l.

Salvia phœnicea. (*B. T. O.* 1890, 267.) G. A pretty species with ovate or oblong-ovate rather finely toothed l. 1–2 in. long, and terminal spikes of magenta-carmine fl. Ecuador.

Salvia Pitcheri. (*G. C.* 1880, xiv. 685; *F. M.* t. 455.) H. H. or G. herb. per. Stem branching, 2–3 ft. high.

L. narrow, lanceolate, acute, entire or slightly serrate, covered with stiffish white hairs. Fl. deep blue or pale blue, in dense verticels along the ends of the branches. [*S. azurea*, Lam.] New Mexico.

Salvia prunelloides purpurea. (*Gfl.* 1890, 564; *H. G.* 1890, 484, f.) H. annual. A var. with purple-red fl.

Salvia scapiformis. (*B. M.* t. 6980; *G. C.* 1888, iii. 242.) H. H. or G. per. herb with petiolate broadly ovate or cordate-oblong bluntly-toothed, glabrous radical l. and long slender leafless scapes of pale blue fl. in whorls. China.

Salvia schiedeana. (*K. B.* 1896, 19.) H. A species with hairy stems 1 ft. high and ovate crenate l. 3 in. long; fl.-spike 5. in. long; fl. blue. Mexico.

Salvia Schimperi. (*B. M.* t. 6300.) H. H. herb. per. of robust habit. Stem 2–3 ft. high, very stout, square, more or less woolly. L. 5–7 in. long, lanceolate or ovate-lanceolate, acute, crenulate, covered with a cobwebby wool especially beneath. Panicle large, glandular-pubescent, as are the bracts and calyces: bracts orbicular-ovate with spiny tips, ciliate, white, with green borders. Corolla white; tube twice as long as the calyx. Abyssinia.

Salvia splendens Bruanti. (*F. M.* t. 447.) G. per. Var. of dwarfer habit, and with brighter scarlet fl. than the type.

Sambucus Gautschii. (*W. G.* 1890, 292, 371; *Oester. Bot. Zeitschrift*, 1890, xl. 230.) Caprifoliaceæ. H. Form of *S. Ebulus*. India.

Sambucus glauca preparturiens. (*R. H.* 1878, 440.) H. shr. An early-flowering form.

Sambucus pyramidata. (*R. H.* 1884, 398.) H. shr. of narrow pyramidal habit, with robust l. having numerous large elongated unequal deeply-toothed leaflets. [*S. nigra*, Linn. var.]

Sambucus racemosa arborescens. (*H. G.* 1888, 561.) H. A var. with larger l. composed of 7–9 oblong leaflets. Rocky Mountains.

—— Var. **heterophylla.** (*Gfl.* 1891, 656, f. 123.) H. A garden var. having the l. simple or composed of three irregularly formed leaflets.

Sambucus racemosa plumosa. (*R. H.* 1886, 399.) H. Leaflets rather crowded, deeply pinnatifid.

—— Var. **plumosa aurea.** (*M. D. G.* 1896, 27.) H. A form of the scarlet-berried elder with finely cut golden l.

—— Var. **serratifolia.** (*R. H.* 1886, 399.) H. Similar to var. *plumosa*, but with rather narrower and less deeply pinnatifid leaves.

Sanchezia longiflora. (*Fl. des S.* t. 2460.) Acanthaceæ. S. shr. [Syn. *Ancylogyne longiflora*, Hort.] Ecuador.

Sansevieria aurea variegata. (*Williams' Cat.* 1887, 23.) Hæmodoraceæ. S. L. thick, leathery, oblong-obovate, pale green in the centre, with two broad bands of creamy white and a narrow pale green margin. Zanzibar.

Sansevieria Kirkii. (*K. B.* 1893, 186; *B. M.* t. 7357.) S. A robust species allied to *S. longiflora*, producing stout thick leathery l. 9 ft. high, which yield a valuable fibre; fl. in a dense head, tubular, white.

Sansevieria subspicata. (*G. C.* 1889, vi. 436.) S. Allied to *S. thyrsiflora*, but differing in having unspotted l. and longer sub-spicate fl. South Africa.

Sapindus utilis. (*R. H.* 1895, 199, 303, f. 90–2.) Sapindaceæ. G.

Sarcanthus auriculatus. (*K. B.* 1895, 9.) Orchidaceæ. S. Allied to *S. Parishii*, differing principally in having a pair of ear-like lobes at the base of the lip. The fl. are greenish white, lined with purple.

Sarcanthus belophorus. (*G. C.* 1883, xx. 262.) S. A small species with undulate ligulate equally bilobed l. and small ochraceous fl. with two longitudinal purple-brown stripes on the sep., pet. and lip.

Sarcanthus flexus. (*G. C.* 1882, xvi. 492.) S. A robust species with short coriaceous ligulate bilobed l. and a zigzag panicle of yellowish brown fl Borneo.

Sarcanthus hincksianus. (*G. C.* 1878, ix. 73.) S. Allied to *S. teretifolius* but differing in being more slender, having smaller fl., a longer and more attenuate spur, side lobes of

the lip blunt, a callus with median angles, and the sep. and pet. green with 3 equal red stripes, as in *S. teretifolius*.

Sarcanthus lendyanus. (*G. C.* 1884, xxi. 44.) S. Allied to *S. terminus*; l. linear, blunt, bilobed; fl. in a small loose panicle; sep. and pet. greenish, with a purple disk; lateral lobes of the lip roundish, with introrse angles, orange with 2 purple lines; middle lobe oblong, white with purple spots; spur as long as the purple ovary. Saigon.

Sarcanthus mirabilis. (*G. C.* 1878, x. 300.) S. L. 6 in. long. Fl. small, yellowish, with a purplish spur, in a small erect racemose panicle 18 in. long. Burma?

Sarcanthus striolatus. (*G. C.* 1882, xviii. 168.) S. Much like *S. racemiger* but l. narrower and the fl. orange. Philippines.

Sarcochilus borneensis. (*Ill. H.* 1892, t. 161.) Orchidaceæ. S. Of erect habit, with long peduncles bearing a short spike of yellowish fl.; sep. narrow, spreading; pet. about 1½ in. long; lip spotted. Borneo.

Sarcochilus crassifolius. (*K. B.* 1894, 396.) S. A species with a climbing stem, short ovate-oblong fleshy l. and short scapes bearing a few small yellowish fl.

Sarcochilus hainanensis. (*K. B.* 1896, 199.) S. Allied to *S. Arachnites*; stem slender; l. linear-oblong, 4 in. long; raceme 3 in. long; fl. light yellow; sep. and pet. 1½ in. long; lip shorter. Hainan.

Sarcochilus Hartmanni. (*B. M.* t. 7010; *G. C.* 1888, iv. 186.) S. This is the plant known also as *Thrixspermum Hartmanni*. Queensland.

Sarcochilus muscosus. (*K. B.* 1893, 7.) S. Allied to *S. hirtulus*. It has a dwarf stem, distichous oblong l. and a short hairy scape of small yellow and purple fl. Andaman Islands.

Sarcochilus rubricentrum. (*G. C.* 1880, xiv. 38.) S. L. oblong, about 5 in. long. Fl. 12–20, white with a red centre spotted with darker red. Lip banded with red across the front. Australia.

Sarcobatus vermiculatus. (*Späth Cat.* 1894–5.) Chenopodiaceæ. H. A white-barked thorny bush with narrow linear l. [*S. Maximiliani*, Nees.] Western North America.

Sarcopodium Dearei. (*G. C.* 1883, xx. 108, f. 17; *Fl. and P.* 1883, 108.) Orchidaceæ. S. A curious little plant with small ovoid pseudobulbs, solitary oblong l. and slender peduncles about 3 in. long, bearing one fl. about 1 in. in diam.; dorsal sep. oblong acute, olive-yellow, with purple tessellations; lateral sep. spreading, yellow with lilac stripes; pet. reflexed, tessellated; lip movable. [*Bulbophyllum Dearei*, Reichb. f.] Borneo.

Sarcopodium godseffianum. (*G. C.* 1890, vii. 800; *G. M.* 1890, 540. f.) S. A Philippine form of *Bulbophyllum Dearei*.

Sargentia aricocca. (*B. T. C.* 1889, 341.) Palmæ. S. [*Pseudophœnix Sargenti*, H. Wendl.] Florida.

Sarmienta repens. (*R. H.* 1879, 320; *B. M.* t. 6720.) Gesneraceæ. G. Plant with slender trailing stems, small opposite cordate-ovate sub-sessile entire coriaceous green l. Fl. large (for the size of the plant), scarlet-red, inflated-tubular, villous, on slender peduncles 1 in. long. Chile.

Sarracenia atkinsoniana. (*Bull Cat.* 1884, 15.) Sarraceniaceæ. G. Garden hybrid between *S. flava* and *S. purpurea*.

Sarracenia atro-sanguinea. (*Ill. H.* 1880, t. 386; *Bull Cat.* 1880, 7, t. 6.) G. A handsome form with the lid of the pitcher at first green with red veins, afterwards becoming a deep blood red with a satiny lustre. [*S. purpurea*, Linn. var.] North America.

Sarracenia Chelsoni. (*Veitch Cat.* 1879, 27, f. 18; *G. C.* 1880, xiii. 725, f. 129; 1881, xv. 817, 821, f. 147–8.) G. Garden hybrid between *S. rubra* and *S. purpurea*.

Sarracenia Courtii. (*Veitch Cat.* 1885, 13, f.; *Gfl.* 1886, 29, f.) G. A garden hybrid between *S. purpurea* and *S. psittacina*.

Sarracenia crispata. (*Ill. H.* 1880, t. 387; *Bull Cat.* 1880, 7, t. 7.) G. Perhaps a natural hybrid between *S. flava* and *S. rubra*.

Sarracenia decora. (*G. C.* 1889, vi. 250.) A hybrid probably from *S. psittacina* and *S. variolaris.*

Sarracenia excellens. (*Bull Cat.* 1884, 15.) G. Garden hybrid between *S. variolaris* and *S. Drummondii.*

Sarracenia exculta. (*Bull Cat.* 1884, 15.) G. Garden hybrid.

Sarracenia exornata. (*Bull Cat.* 1884, 15.) G. Garden hybrid between *S. crispata* and *S. purpurea.*

Sarracenia Fildesii. (*Williams' Cat.* 1881, 36.) G. A form with large trumpet-shaped pitchers recurved at the margin, showing a well-defined deep purple reticulation.

Sarracenia flava ornata. (*Bull Cat.* 1880, 7, t. 5.) G. Pitchers clear green, with strongly marked purple-red reticulations. South United States.

Sarracenia formosa. (*Bull Cat.* 1884, 15.) G. Garden hybrid between *S. purpurea* and *S. variolaris.*

Sarracenia illustrata. (*Bull Cat.* 1884, 15.) G. Garden hybrid.

Sarracenia maddisoniana. (*Bull Cat.* 1884, 15.) G. Garden hybrid between *S. variolaris* and *S. psittacina.*

Sarracenia mandaiana. (*G. C.* 1893, xiii. 455.) G. A garden hybrid between *S. flava rubra* and *S. Drummondii.*

Sarracenia mitchelliana. (*Bull Cat.* 1884, 15.) G. Garden hybrid between *S. rubra* and *S. purpurea.*

Sarracenia mooreana. (*Veitch Cat.* 1877, 26.) G. A garden hybrid between *S. flava* and *S. Drummondii.*

Sarracenia porphyroneura. (*Fl. and P.* 1882, 107.) G. A dwarf form having the upper part of the pitchers and the erect circular lids veined with purple.

Sarracenia Sanderæ. (*G. C.* 1896, xx. 534.) G. A seedling or hybrid of garden origin.

Sarracenia rubra acuminata. (*Bull Cat.* 1884, 15.) G. Garden hybrid.

Sarracenia swaniana. (*Bull Cat.* 1884, 16.) G. Garden hybrid between *S. variolaris* and *S. purpurea.*

Sarracenia tolliana. (*Bull Cat.* 1884, 16.) G. Garden hybrid between *S. Drummondii* and *S. flava.*

Sarracenia vittata maculata. (*Williams' Cat.* 1891, 25.) A garden hybrid between *S. purpurea* and *S. Chelsoni.*

Sarracenia Willisii. (*G. M.* 1894, 410, f.) G. A garden hybrid between *S. Courtii* and *S. melanorhoda.*

Sarracenia wilsoniana. (*Bull Cat.* 1884, 16.) G. Garden hybrid between *S. purpurea* and *S. flava.*

Sarracenia wrigleyana. (*Veitch Cat.* 1889, 12, f.; *Gfl.* 1889, 495, f. 75.) Garden hybrid between *S. psittacina* and *S. variolaris.*

Satyrium membranaceum. (*G. C.* 1889, v. 137.) Orchidaceæ. G. Terrestrial orchid. A large handsome species with bright red fl. on scapes a foot or more high. It is distinguished from all others of the genus by its toothed fringed pet. South Africa.

Satyrium nepalense. (*B. M.* t. 6625.) G. A foot high or more, with a few ovate or lanceolate l. and an elongated spike of fragrant rose-pink fl. Himalaya.

Satyrium sphærocarpum. (*B. M.* t. 7295.) G. A terrestrial species with ovate oblong acute green l. and an erect scape 12 in. high, bearing about 20 *Orchis*-like fl. 1 in. long, white, with red spots and lines. South Africa.

Saurauja lanceolata. (*Bull Cat.* 1882, 17.) Ternstrœmiaceæ. S. shr. of stout growth. L. alternate, oblanceolate, spine-toothed, bright green. Java.

Saxifraga afghanica. (*Gard.* 1896, xlix. 260.) Saxifragaceæ. H. A plant with white fl. belonging to the *Megasea* group. [*S. Strachyi*, Hook. f. & Thoms. var. *alba*, Regel.] Affghanistan.

Saxifraga apiculata. (*G. C.* 1894, xv. 556–7, f. 68.) H. This is the plant that has been grown in gardens as *S. lutea-purpurea.* It is a supposed hybrid between *S. scardica* and *S. aretioides.*

Saxifraga aquatica. (*Gfl.* t. 1167.) H. This is the species grown as *S. adscendens* and *S. petræa*. Pyrenees.

Saxifraga atlantica. (*W. G.* 1895, 286, f. 25.) H. A compact dwarf growing plant with light green roundish l. and slender stems bearing large white scented fl. Atlas Mountains.

Saxifraga Boydi. (*Gard.* 1890, xxxviii. 10, t.) A garden hybrid between *S. burseriana* and *S. aretioides*.

Saxifraga burseriana major. (*G. C.* 1884, xxi. 141, f. 27.) H. rockwork plant with small dense rosettes of acute ciliated l. and large solitary white fl. on peduncles about 2 in. high. Austrian Alps.

Saxifraga Camposii. (*B. M.* t. 6640.) H. A dwarf tufted rockwork plant. L. flabellately 3–5-lobed. Fl. racemose, ⅔ in. in diam., white. Spain.

Saxifraga cortusifolia. (*B. M.* t. 6680.) H. Related to *S. Fortunei* and *S. sarmentosa*, with roundish lobulate toothed l. and panicles of white fl.; pet. irregular in size. Japan.

Saxifraga diversifolia. (*B. M.* t. 6603.) H. per. with habit of a *Parnassia*. Radical l. cordate, on long petioles; stem l. amplexicaul, ovate-oblong, acute, entire. Fl. ½ in. in diam., yellow, arranged in lax corymbs. Himalaya.

Saxifraga Engleri. (*Gfl.* 1890, 649.) H. A hybrid between *S. Aizoon* and *S. cuneifolia*.

Saxifraga globulifera. (*W. G.* 1895. 284.) This makes a turfy carpet of thickish divided bright green l. During winter and spring the foliage turns purplish red and forms a good contrast with the white fl. Atlas Mountains.

Saxifraga Hirculus grandiflora. (*Gfl.* t. 1035, f. 4.) Fl. 1 in. in diam.

Saxifraga Huguenini. (*Gfl.* t. 1230, f. b.) H. A neat little alpine per. 1–2 in. high. of creeping tufted habit; stems clothed with imbricating oblong ciliate-toothed l. ⅛–¼ in. long and ending in a solitary shortly stalked white fl. Eastern Switzerland.

Saxifraga latepetiolata. (*B. M.* t. 7056.) H. A remarkable biennial species. Stems 8–12 in. high, branched, robust. L. with broad petioles; blade reniform, deeply 3–5-lobed, coarsely crenate, glandular-hairy; lower l. densely rosulate; fl. crowded, ½ in. in diam., white. Spain

Saxifraga lingulata cochlearis. (*B. M.* t. 6688.) H. alpine plant with tufted rosettes of spathulate coriaceous l. ½–1 in. long and slender panicles of white fl.; peduncle and branches purplish brown, glandular-pubescent. [*S. cochlearis*, Reichb.] Maritime Alps.

Saxifraga luteo-purpurea. (*G. C.* 1888, iii. 365.) H. [*S. apiculata*, Engl., not *S. luteo-purpurea*, Sternb.]

Saxifraga macropetala. (*G. C.* 1888, iii. 556.) H. Like *S. oppositifolia*, with crowded roundish or cuneate obtuse ciliate pitted l. and deep lilac fl. resembling those of *S. oppositifolia*. The ovary has a ring-like disk around its base. Tyrol.

Saxifraga marginata. (*B. M.* t. 6702.) H. Belonging to the *Aizoon* group, with dense rosettes of small oblong l. dotted on the margins with a series of lime incrustations: fl.-stem 2–4 in. high, purplish: fl. white, ½ in. in diam., in small rather compact cymes. Italy and Greece.

Saxifraga media Frederici-Augusti. (*G. C.* 1887, i. 47.) H. Alpine plant of very dwarf tufted habit, with small rosettes of narrow lanceolate bright green l. and numerous yellowish fl. on short leafy stalks. *S. Frederici-Augusti* is a totally different plant. [*S. apiculata*, Engl.]

Saxifraga Milesii. (*G. C.* 1882, xviii. 102.) H. In the way of *S. Stracheyi*, but with longer l., oblong calyx-segments and white pet. with a more distinct claw. L. 9–12 in. long, 4–5 in. broad. Corymbs dense; peduncle and calyx glandular-pubescent. Himalaya.

Saxifraga montavoniensis. (*Gfl.* 1890, 649.) H. Probably a var. of *S. Cotyledon* with white fl. and red calyx and stamens.

Saxifraga oppositifolia pallida. (*G. C.* 1888, iii. 714.) H.

Saxifraga pallida. (*G. C.* 1885, xxiv. 104.) H. A rockwork plant with a small rosette of spathulate green l. and 1–4-flowered peduncles, 1–4 in. high. Fl. white; pet. persisting during the ripening of the fr.; ovary dull purplish red. Sikkim.

Saxifraga peltata. (*R. H.* 1880, 280; *B. M.* t. 6074.) H. herbaceous per. L. radical, long-stalked, peltate with deeply cut margins. Fl.-stem 1–2 ft. high, villous, red. Fl. ½ in. in diam., pale rose. California.

Saxifraga sancta. (*Fl. and P.* 1882, 76.) H. rockwork plant of dense tufted habit, with ligulate-lanceolate acuminate ciliate-dentate dark green l. and short dense spike of yellow fl. Mount Athos.

Saxifraga Schmidtii. (*Gfl.* t. 946.) H. per. This seems identical with the common *S. ligulata*. It has exactly the same foliage and panicles of rose-coloured fl. Himalaya.

Saxifraga Stracheyi alba. (*Gfl.* t. 1228.) H. per. A var. with white fl., very similar to *S. Milesii*. Himalaya.

Saxifraga tombeanensis. (*Jard.* 1888, 179.) H. Alpine per. something in the way of *S. burseriana*, with rosettes of small erect ovate-lanceolate or subulate l.; stem-l. similar but glandular-hairy; stems bright red, glandular-hairy, bearing 3–4 white fl. Tyrol.

Saxifraga tricolor superba. (*R. H.* 1881, 120.) G. per. herb in the way of *S. sarmentosa* and probably only a garden var. of that species. Stems creeping; l. orbicular, entire, of a delicate rose colour, sometimes red or flesh-coloured, or presenting all these shades in different degrees.

Saxifraga virginiensis, flore pleno. (*Gfl.* t. 1092.) H. A var. with compact white double fl.

Scabiosa caucasica elegans. (*Gfl.* t. 1212.) Dipsacaceæ. H. A form with long petiolate lanceolate entire radical l., pinnatisect stem-l. and handsome heads of blue fl. 2½ in. in diam.

—— Var. **heterophylla.** (*Gfl.* t. 1084.) H. A form having hairy pinnatisect l. with linear-lanceolate acute segments and large heads of pale purple fl.

Scabiosa correvoniana. (*G. C.* 1892. xii. 614.) H. A handsome bushy species with erect stems 7–9 in. high, bearing large heads of pale yellow fl. Abkhasia, Transcaucasia.

Scabiosa Pterocephala. (*B. M.* t. 6526.) H. dwarf tufted per. L. simple, elliptic or lyrate-pinnatifid, crenately toothed, green. Peduncles 2–3 in. long, stout. Fl.-heads purple, 1–1½ in. in diam. Greece.

Scabiosa Victoriæ. (*W. G.* 1888, 437.) H. Garden hybrid.

Scaphosepalum antenniferum. (*G. C.* 1890, vii. 709.) Orchidaceæ. G. L. elliptic, 3–8 in. long; scape 18 in. long. Fl. greenish yellow, lined with brown. Allied to *S. pulvinare*.

Scaphosepalum microdactylum. (*K. B.* 1893, 335.) G. Near *S. ochthodes*. It has oblong fleshy l., 2 in. long, with three apical teeth and scapes 5 in. long, bearing small greenish yellow and brown fl.

Scelochilus carinatus. (*K. B.* 1895, 284.) Orchidaceæ. G. L. lanceolate, 4 in. long. Raceme pendulous, short, bearing about seven fl.; sep. ¾ in. long, light yellow; pet. ½ in. long, purple and white; lip ½ in. long, white with a purple blotch. South America.

Scelochilus variegatus. (*L.* xi. 26.) S. A small Orchid with whitish purple-lined fl.; pseudobulbs flat, very thin; l. erect or spreading, narrowly lanceolate, 4–5 in. long. Colombia.

Schaueria flavicoma. (*G. C.* 1883, xix. 14.) Acanthaceæ. S. Often grown as *Schaueria* (or *Justicia*) *calycotricha*. Differing from the true *S. calycotricha* in having narrower l. and glandular-pubescent calyces. Brazil.

Schismatoglottis crispata. (*B. M.* t. 6576; *Veitch Cat.* 1881, 12. 17.) Araceæ. S. A foliage plant of dwarf habit. L. cordate-oblong, shortly cuspidate, dark green above, with a broad irregular greyish band on each side of the midrib, midway between it and the margin, or with greyish stripes running from the midrib between the veins; petiole with crisped transparent edges. Infl. subsessile. Spathe convolute and green in the basal persistent part, open and creamy white in the upper deciduous part. Spadix pale yellow. Borneo.

Schismatoglottis decora. (*Bull Cat.* 1884, 16.) S. A dwarf foliage plant with ovate acuminate green l. thickly blotched with silvery grey; under surface pale green. Borneo.

Schismatoglottis latifolia. (*Bull Cat.* 1882, 17.) S. L. elliptic, cordate at the base, bright green with a band of greyish-green on each side of the midrib. Spathes whitish. Java.

Schismatoglottis Lavalleei immaculata. (*G. C.* 1882, xviii. 298.) S. per. foliage plant differing from the type in the absence of spots on the upper surface of the leaves and in their dark vinous purple colour beneath. Java.

—— Var. **lansbergiana.** (*Ill. H.* 1882, t. 468; *Lind. Cat.* 1883, 5.) [*S. Lavalleei*, Linden, var. *immaculata*, Hort.]

—— Var. **purpurea.** (*G. C.* 1882, xviii. 298.) S. per. foliage plant only differing from the type in the bright green l. blotched with grey above and dark vinous purple beneath. Sumatra.

Schismatoglottis longispatha. (*Bull Cat.* 1881, 20, f.; *Ill. H.* 1882, xxix. 159, t. 466.) S. per. herb, of dwarf tufted habit with obliquely ovate l. 3–4 in. long, light green, with a feathered central stripe of silvery grey. Borneo.

Schismatoglottis neoguineensis. (*G. C.* 1885, xxiv. 776; *Gfl.* 1886, 187.) S. [Syn. *Colocasia neoguineensis*, André.]

Schismatoglottis pulchra. (*Ill. H.* 1884, t. 520.) S. foliage-plant with somewhat obliquely-oblong acute l. cordate at the base, 4–5 in. long, $1\frac{3}{4}$–$2\frac{1}{2}$ in. broad, of a peculiar glaucous green above, covered with irregular silvery green spots. Borneo.

Schismatoglottis siamensis. (*Bull Cat.* 1885, 15.) S. foliage plant of neat habit, with ovate acuminate glossy-green l. spotted with white.

Schismatoglottis variegata. (*Bull Cat.* 1884, 16.) S. Small foliage plant with lanceolate dark green l. with a broad silvery central band. Spathe with a glaucous green tube and a pale yellowish green boat-shaped limb. Borne o.

Schizanthus Grahami lilacinus. (*Gfl.* 1887, 665, f. 169.) Solanaceæ. G. Garden variety.

Schizocasia Regnieri. (*Ill. H.* 1887, t. 6; *G. C.* 1887, i. 421.) Araceæ. S. foliage-plant much like *S. Portei* in general appearance. Petioles pale yellowish green, irregularly banded with rose. Blade of l. sagittate, pinnatifid, dark green, with pale whitish green midrib and nerves. Siam.

Schizocodon soldanelloides. (*Gard.* 1892, xli. 314; *G. C.* 1893, xiii. 415, f.; *B. M.* t. 7316.) Diapensiaceæ. H. alpine 2–4 in. high; l. small, evergreen, ovate, toothed; fl. fringed like those of *Soldanella*, deep rose in the centre, shading to blush-white. Japan.

Schlimmia trifida. (*G. C.* 1876, vi. 708; vii. 140, f. 22.) Orchidaceæ. S. Pseudobulbs narrow, semi-fusiform, wrinkled, bearing one stalked oblong acute membranous l. Peduncle drooping, purplish violet, few-flowered. Fl. unilateral; sep. and pet. white, adorned with a few purplish spots inside; the blunt sac of the two lateral connate sep. is in part adnate to the ovary. Pet. linear, acute, recurved. The hypochile of the lip is trifid, white and orange: epichile lanceolate; the lip is much shorter than the stout semi-terete column, which has square fleshy wings, and under the top an orange anther and a glaucous middle line. Colombia.

Schlumbergeria Lindeni. (*B. H.* 1883, 121, tt. 10–12. Bromeliaceæ. S. [Syn. *Massangea Lindeni*, André.]

Schlumbergeria morreniana. (*B. H.* 1883, 46, t. 4–6; *Fl. and P.* 1883, 75.) S. L. gracefully recurving, a yard long, green, marked with numerous darker green transverse lines above and with reddish lines beneath. Scape tall, with green adpressed bracts; spikes several, dense-flowered, congested into a short compact bunch; bracts dark purple; fl. yellow.

Schlumbergeria Roezlii. (*B. H.* 1879, t. 19.) S. Of very bold habit, 3 ft. high. The l. are $1\frac{1}{2}$ ft. long, $1\frac{1}{2}$ in. broad, spreading, unarmed green. Panicle lax. Fl. sessile, spirally arranged, 1 in. long. Calyx green. Corolla gamopetalous, salver-shaped, white and green. Andes of Peru.

Schlumbergeria virescens. (*B. H.* 1879, 225.) This plant has been cultivated under the following names :— *Puya virescens*, *Tillandsia vittata*, *Anoplophytum vittatum*, *A. stramineum*.

Schœnlandia gabonensis. (*J. H. F.* 1896, 467.) Pontederiaceæ. S. An acaulescent terrestrial plant with cordate acute l. The solitary fl. spring from short branches in the axils of the bracts ; branches, bracts and fl. pale violet. Western Tropical Africa.

Schomburgkia chionodora. (*G. C.* 1886, xxv. 73.) Orchidaceæ. S. Something in the way of *S. Humboldtii*, with many angled pseudobulbs 1 ft. or more long, having but a single central cavity. L. cuneate-oblong, obtuse, 4–5 in. broad. Fl. numerous, white, with a purple spot on the lip. Sep. ligulate, acute ; pet. spathulate, blunt ; lip large, 4-lobed, denticulate, wavy, with five entire keels on the disk. Central America.

Schomburgkia Humboldtii. (*Veitch Man. Cattl.* 101 ; *W. O. A.* t. 507.) S. A handsome species with fl. somewhat like those of a *Lælia*. Pseudobulbs tapering, 6–8 in. long, furrowed. L. 2–3, oblong, leathery, 6 in. long. Fl.-stem 3–4 ft. long, paniculate. Fl. 2½–3 in. in diam. Sep. and pet. wavy, pale lilac ; the pet. tinted with purple towards the apex. Lip with triangular amethyst-purple side lobes and a bilobed fringed and crisped front lobe bright purple, streaked with paler colour ; disk yellow, with 5–7 keels, purple towards their base. Venezuela.

Schomburgkia lepidissima. (*G. C.* 1889, v. 72.) S. The plant is similar to *S. Tibicinis*. Flower-scape 3½ ft. long ; the fl. looking like those of *Læliopsis domingensis*.

Schomburgkia marginata immarginata. (*G. C.* 1887, i. 447.) S. A var. with brown wavy sep. and pet. without a yellow margin ; lip and column white.

Schomburgkia rhionodora kimballiana. (*G. C.* 1888, iii. 136 ; *O.* 1888, 197.) S. A var. with the branches and fl. light purple. [A misprint for *S. chionodora kimballiana*.]

Schomburgkia rosea. (*O. B.* 1893, 103 ; *L.* x. t. 475.) S. A near ally of *S. undulata* with smaller fl. coloured dull reddish purple ; lip purple-rose, with three white keels ; column white spotted with purple. Colombia.

Schomburgkia sanderiana. (*G. C.* 1891, ix. 202 ; *R.* ser. 2, t. 59.) S. Allied to *S. Humboldtii*. It has hollow pseudobulbs, very rigid l. and a lax branched panicle of rosy carmine medium-sized fl.

Schomburgkia thomsoniana. (*G. C.* 1887, ii. 38 ; *Veitch. Man. Cattl.* 102.) S. Similar to *S. Tibicinis* but smaller. Sep. light yellow with the central part outside light mauve with whitish dots. Pet. light sulphur with dark purple marks on the mid-line outside. Lip with rounded angulate side lobes and a wavy oblong front lobe, obscurely 3-keeled, blackish-purple, with a white area near the apex and some yellow on the front part of the keels. [Syn. *Bletia thomsoniana*, Reichb. f.]

Sciadopitys verticillata variegata. (*R. H.* 1887, 83.) Coniferæ. H. Garden variety.

Scilla Adlami. (*G. C.* 1891, ix. 521.) Liliaceæ. G. A small-flowered species after the style of *S. italica*. Fl. mauve-purple. Natal.

Scilla antitaurica. (*G. and F.* 1890, 169.) H. An early-flowering robust many-flowered form of *S. sibirica*. Anti-Taurus.

Scilla Bellii. (*G. C.* 1884, xxii. 488.) H. L. oblong-lanceolate, acute, 3–4 in. long, rough on the edges ; fl. racemose ; perianth campanulate, ⅓ in. long, brownish blue. Central Persia.

Scilla bipartita. (*Gn.* 1892, 609.) G. A dwarf winter-flowering species with spikes of porcelain-blue fl. Morocco.

Scilla Buchanani. (*G. C.* 1893, xiii. 568.) G. A species with a small globose bulb, lanceolate green l. a foot long and a flexuous green scape 8 in. long bearing a dense raceme of green fl. with purple filaments. Nyasaland.

Scilla humifusa. (*G. C.* 1881, xv. 626.) G. bulb with two or three cordate oblong l., 3–4 in. long, 1½–2 in. broad, pale green with a few darker green blotches. Scape 3–4 in. long, purple at base, green above. Raceme 3–4 in. long. Pedicels 1 line long. Fl. small, reddish green. Natal.

Scilla hyacinthoides stricta. (*Acta Hort. Petrop.* 1890, xi. 302.) H. A form having solitary bulbs and erect pedicels to the fl. Palestine.

Scilla laxiflora. (*G. C.* 1891, ix. 668.) G. Allied to *S. revoluta*. Bulb globose; l. lanceolate; scape 3 in. long; fl. green; filaments purple. South Africa.

Scilla Ledieni. (*Gfl.* t. 1294.) G. L. narrow lanceolate, greyish green, spotted with purple-brown, and frequently producing bulbs at the apex. Raceme many flowered; fl. small, green, with purplish tube. Congo.

Scilla leucophylla. (*G. C.* 1893, xiii. 506.) H. Resembling some of the Hyacinths of the subgenus *Bellevalia*, but the segments of the fl. are free to the base. Fl. bright purple, tipped with green. Persia.

Scilla lingulata. (*Gfl.* t. 1261.) H. L. lanceolate; fl. star-like, blue, in racemes. Algeria; Morocco.

—— Var. **lilacina.** (*Gfl.* t. 1261, f. 3.) H. Fl. lilac-blue.

—— Var. **alba.** (*Gfl.* t. 1261, f. 4.) H. Fl. white.

Scilla livida. (*G. C.* 1883, xx. 166.) G. L. 6–8, lanceolate, acuminate, green, unspotted, contemporary with the fl. Raceme 3–4 in. long, dense; fl. pedicellate, green, tinged outside with dull purple. South Africa.

Scilla microscypha. (*G. C.* 1881, xvi. 102.) G. L. oblong-lanceolate 1 ft. long, 4–4½ in. broad, glaucous green, barred near the base beneath with purple-brown and with darker green stripes higher up. Scape as long as the l., green. Raceme dense, 5–6 in. long. Fl. green. South Africa.

Scilla pendula. (*G. C.* 1878, ix. 756.) G. A fine species, with about 4 suberect lanceolate glabrous l. 12–16 in. long, 1¾–2½ in. broad, green on the face, striped and spotted with purple on the back especially towards the base. Scape slender, drooping, 6 in. long, green. Fl. green, in a dense raceme, 3–4 in. long. Stamens lilac with purple anthers. Natal.

Scilla polyantha. (*G. C.* 1878, ix. 104.) G. With 3–5 l., ligulate-lanceolate, erect, 12–15 in. long, 2–2½ in. broad, pale green, blotched with darker green. Scapes 2–3 to a bulb, 4–9 in. long, green dotted with purple. Fl. in a large dense raceme, green outside, dull purple inside. South Africa.

Scilla puschkinioides. (*Gfl.* t. 1050, f. 1.) H. A pretty spring-flowering bulb somewhat like *Scilla bifolia*, with 2–4 broad linear obtuse l. and a raceme of erect star-like pale blue fl. Turkestan.

Scilla sibirica multiflora. (*Gard.* 1895, xlviii. 162, t. 1029.) H. Form with longer flower-spikes than the type.

Scilla subsecunda. (*G. C.* 1881, xvi. 38.) G. Several lanceolate l. 6–8 in. long, 1¼–1½ in. wide, green above, flushed with reddish brown beneath and marked with a few transverse reddish brown bars at the base. Scape pendulous, flexuous, 1 ft. long. Fl. in a dense subsecund oblong raceme 5–6 in. long. Perianth greenish outside, greenish brown within. Filaments purple. South Africa.

Scilla tricolor. (*G. C.* 1880, xiv. 230.) G. This comes nearest to *S. zebrina*, differing in its little blotched l., longer pedicels and green fl. Port Elizabeth, South Africa.

Scindapsus anomalus. (*R. H.* 1884, 536.) Araceæ. S. [Syn. *Marcgravia paradoxa*, Hort.]

Scindapsus pertusus. (*R. H.* 1883, 562, 561, f. 111.) S. The plant figured under this name is not a *Scindapsus*, but *Monstera deliciosa*.

Scirpus Tabernæmontani zebrinus. (*Fl. and P.* 1884, 27.) Cyperaceæ. H. The above is the corrected name for the plant known as *Juncus zebrinus*.

Scolopendrium officinale Valloisii. (*R. H.* 1886, 447, f. 114.) Filices. H. A strong growing var. with the fronds dilated and irregularly divided and crested at their summit, forming large bunch-like tufts. [*S. vulgare*, Symons, var.]

Scolopendrium vulgare densum. (*G. C.* 1882, xvii. 673.) H. A remarkable form about 3 in. high, having the fronds very much branched so that the plant resembles a green ball studded over with innumerable points as in curled parsley.

—— Var. **multifidum.** (*Fl. and P.* 1882, 140.) H. A var. having the tips of the fronds multifidly divided.

Scopolia carniolica hladnikiana. (*G. C.* 1893, xiii. 418, f. 60.) Solanaceæ. H. This chiefly differs from the type in having pale yellow scentless fl. [*S. carniolica*, Jacq. var. *concolor*, Hort.] Eastern Europe.

Scrophularia chrysantha. (*B. M.* t. 6629.) Scrophulariaceæ. H. herb. per. with opposite stalked broadly ovate lobed and toothed l. and small cymes of yellow fl. in a terminal thyrsus. Asia Minor.

Scutellaria formosana. (*G. C.* 1894, xvi. 212; *B. M.* t. 7458.) Labiatæ. G. Closely allied to *S. javanica*, but dwarfer and less hairy. It has square stems, ovate l. 2 in. long and terminal racemes of purplish fl. Hong Kong.

Scutellaria Hartwegii. (*B. M.* t. 6615.) S. half-shrubby per. L. cordate, acuminate, serrate, green above, purple beneath. Fl. racemose, 1 in. long, bright red, with a violet lower lip. Andes of Quito.

Scutellaria Lehmanni. (*Gfl.* t. 1152, f. 1, a-c.) S. Stems erect, herbaceous; l. petiolate, cordate and short; fl. in terminal racemes, bright scarlet-red. Colombia.

Scutellaria purpurascens. (*B. M.* t. 6464.) G. per. L. long-petioled, cordate, acute, dentate. Fl. in terminal racemes. Corolla $\frac{3}{4}$ in. long. Tube and upper lip light blue; lower lip dark violet, with a median white stripe. Tropical America.

Scuticaria Dodgsoni. (*G. C.* 1881, xv. 9.) Orchidaceæ. S. This is probably *S. Hadweni*.

Scuticaria Hadweni. (*O.* 1888, 164; *B. M.* t. 4629.) S. This is the old *Bifrenaria Hadweni* referred by the authors of the Genera Plantarum to *Scuticaria*.

Securidaca ramiflora. (*R. H.* 1882, 332.) Euphorbiaceæ. H. The correct name for *Phyllanthus ramiflorus*, and *Xylophylla ramiflora*. Eastern Asia.

Sedum Albertii. (*Gfl.* t. 1019, f. 3.) Crassulaceæ. H. per., with procumbent stems, terete l. crowded at the ends of the branches and a cymose-paniculate infl. of white fl. Turkestan.

Sedum cyaneum. (*Gfl.* t. 972, f. 2.) H. A pretty dwarf species with thick oblanceolate blunt opposite l. $\frac{1}{2}$ in. long and cymes of purplish fl. Siberia.

Sedum englerianum. (*N. B.* 1896, 186.) H. A densely caespitose species probably nearly allied to *S. dasyphyllum* or *S. gypsicolum*. Pyrenees.

Sedum formosanum. (*G. C.* 1885, xxiv. 134.) G. or H. H. annual 6 in. high, with a repeatedly-forked stem, spathulate obtuse bright green l. and sessile bracteate yellow fl. Formosa.

Sedum liebmannianum. (*G. C.* 1880, xiv. 38.) G. per. A tufted herbaceous species, with small conical l. and small white fl. tinged with red. Mexico.

Sedum lydium. (*G. C.* 1877, viii. 521.) H. succulent of neat compact habit and green colour. This is one of the Sedums which are so commonly used for carpet bedding. Asia Minor.

Sedum retusum. (*G. C.* 1880, xiv. 38.) G. per., with fleshy grey branches mealy when young, leafy only at the tip. L. fleshy, green, shining, obovate-oblong, retuse, $\frac{1}{2}$–$\frac{3}{4}$ in. long. Fl. $\frac{1}{2}$–$\frac{3}{4}$ in. in diam., white, with a rosy centre, arranged in small dense terminal clusters. Mexico.

Sedum Rhodiola linifolium. (*Gfl.* t. 1080, f. 1–3.) H. A narrow-leaved var. with purplish fl. [*Sedum roseum*, Scop. var.]

Selaginella amœna. (*Bull Cat.* 1884, 16.) Selaginellaceæ. S. Stem about 1 ft. high, the upper portion tripinnately branched; bright cheerful green. [*S. caulescens*, Spring, var. *amœna*.] Mexico.

Selaginella bellula. (*G. C.* 1879, xi. 173, f. 25; *Bull Cat.* 1879, 7, t. 3.) S. Closely allied to *S. inæqualifolia*, but dwarfer and denser, with pinkish red stems; branches horizontal, dull deep green; stem-l. rather scattered, those on the branchlets closely set, oblong, sub-falcate at the apex, acute, oblique, cordate at the base; l. of the forks obovate, mucronate; spikes slender, 4-angled, $\frac{3}{4}$–1 in. long. The name *S. bellula* having previously been used for another species, T. Moore has substituted the name *S. perelegans* (*G. C.* 1879, xi. 533), for the above-described plant. [*S. caulescens*, Spring, var.] Ceylon.

Selaginella canaliculata. (*Bull Cat.* 1883, 15; *Fl. and P.* 1883, 58.) S. Climber with tetragonal sulcate tripinnately branched stems, adpressed

oblique ovate-oblong lateral l. and acuminate incurved intermediate ones. Tropical Asia.

Selaginella caulescens gracilis. (*Bull Cat.* 1880, 7.) S. An elegant dwarf-growing var. with distantly branched stems of a bright green colour.

Selaginella cognata. (*Bull Cat.* 1884, 16.) S. A stoutish subscandent species with rooting stems and ovate bipinnately divided branches. The small intermediate l. have converging upcurved points, giving the surface a bristly appearance. [*S. Lobbii*, Moore.] Borneo, &c.

Selaginella flagellifera. (*Bull Cat.* 1886, 9.) S. Stems long, flagelliform, clothed with spreading cordate bright green l. Fruiting spikes $\frac{1}{4}$–$\frac{1}{2}$ in. long. [*S. plumosa*, Baker, var. *flagellifera*.] Tropical Asia.

Selaginella gracilis. (*G. C.* 1886, xxv. 752.) S. Stems sub-erect, 2–3 ft. long, pinnately branched, rather rough; primary divisions narrow-lanceolate, 4–5 in. long; secondary divisions simple, the lower ones 1 in. long, $\frac{1}{8}$ in. broad. L. ovate-falcate, bright green: stipular l. narrow-lanceolate, cuspidate, parallel and close set. Spikes terminal, tetragonal, $\frac{1}{2}$–1 in. long. South Sea Islands.

Selaginella grandis. (*G. C.* 1882, xviii. 40, f. 7, 8; *Fl. and P.* 1882, 123.) S. An erect-growing species with large broad recurved grass-green fronds, much branched; the divisions $\frac{1}{2}$ in. broad, densely clothed with distichous imbricating subfalcate l. Borneo.

Selaginella involvens variegata. (*G. C.* 1883, xix. 405, f. 59; *Bull Cat.* 1883, 15, t. 8.) S. A pretty var. having the tips of some of the branches pure white.

Selaginella kraussiana aurea. (*Bull Cat.* 1880, 7.) S. var. with golden yellow branches.

Selaginella Pervillei. (*Bull Cat.* 1884, 16.) S. Stems erect, red, above quadripinnately divided; leaves of a dark green colour. [*S. Vogelii*, Spring.] Tropical Africa; Madagascar, &c.

Selaginella pitcheriana. (*G. C.* 1893, xiv. 651.) S. [*S. erythropus*, Spring, var. *minor*, Hort.]

Selaginella tassellata. (*Bull Cat.* 1887, 12 f.) S. Caudex creeping. Stems gracefully arching, bipinnately branched; the branchlets ending in drooping slender spikes. Brazil.

Selaginella Victoriæ. (*Bull Cat.* 1878, 8.) S. Subscandent species, with creeping caudex and scandent stems, 2–3 ft. or more long, continued by new terminal growths, regularly pinnately branched, as are also the branches; branchlets simple, 1 in. long, terminating in slender tetragonal spikes 1–2 in. long. Borneo.

Selaginella viridangula. (*Fl. and P.* 1884, 94; *Williams' Cat.* 1884, 15, f. 9.) S. Stems bipinnately divided, the divisions terminating in long drooping quadrangular spikes. Polynesia.

Selaginella Vogelii, foliis variegatis. (*Lind. Cat.* 1881, 4.) S. A variegated form.

Selenia aurea. (*B. M.* t. 6607.) Cruciferæ. H. annual, 6–9 in. high, quite glabrous. L. pinnatifid. Fl. bright yellow, in bracteate racemes. Arkansas.

Selenipedium Ainsworthii delicatum. (*O. R.* 1893, 244.) Orchidaceæ. S. A garden hybrid between *S. longifolium hinksianum* and *S. Sedeni candidulum*.

Selenipedium caudatum albertianum. (*L.* iv. t. 174.) S. A var. with yellow sep. and the lip yellowish, stained with dark purple in front.

—— **Var. roseum.** (*Ill. H.* 1886, t. 596.) S. A var. with brighter-coloured fl. than in the type. The very long pet. are rosy purple and the lip is also washed with the same colour.

Selenipedium chlorops. (*G. C.* 1888, iii. 584; *H. G.* 1888, 308.) S. Garden hybrid. [Syn. *Cypripedium chlorops*, Reichb. f.]

Selenipedium dalleanum. (*R. H.* 1895, 164, 548, f. 180, t.) S. A tall-growing plant with large fl.; the oblong smooth pouch a deep glossy carmine-red.

Selenipedium finetianum. (*O. R.* 1895, 102.) S. A garden hybrid between *S. cardinale* and *S. caudatum*

Selenipedium grande. (*R. H.* 1885, 301 ; *R.* ser. 2, t. 16.) S. A garden hybrid between *S. longifolium* and *S. caudatum*.

Selenipedium Helenæ. (*G. and F.* 1894, 66.) S. A garden hybrid between *S. Wallisii* and *S. leucorrhodum*.

Selenipedium kaieteurum. (*G. C.* 1885, xxiv. 262.) L. coriaceous, bright dark green, 7–9 in. long, 2–2½ in. broad. Scape many-flowered, pubescent ; sheaths and bracts glabrous, olive-green, with brownish red nerves. Sep. pale green, with reddish brown nerves on the outside, pubescent ; the upper one oblong, hooded at the apex, with recurved margins ; the lower elliptic, concave ; both with crisped margins. Pet. 2½ in. long, falcately linear-oblong, obtuse, pale green, with brownish crimson veins ; margins recurved, wavy and ciliate ; lip light olive-green, with brownish crimson veins and densely dotted with the same colour on the subconnate inflexed side lobes. [*S. lindleyanum*, Reichb. f.] Kaieteur Falls, British Guiana.

Selenipedium nitidissimum. (*G. C.* 1888, iv. 6.) S. Garden hybrid. [Syn. *Cypripedium nitidissimum*, Reichb. f.]

Selenipedium Parishii. (*R. H.* 1885, 132.) S. This appears to be the same as *Cypripedium Parishii*.

Selenipedium pulchellum. (*O. R.* 1893, 166.) S. A garden hybrid between *S. grande* and *S. Sedeni candidulum*.

Selenipedium reticulatum. (*L.* i. t. 10.) S. A remarkable species with whitish fl. reticulately veined with green. Dorsal sep. narrow, lanceolate, acute ; lower sep. broadly elliptic-oblong, very obtusely rounded at the apex ; pet. linear, acute, twisted, horizontally spreading. Ecuador.

Selenipedium sargentianum. (*O. R.* 1893, 239 ; *B. M.* t. 7446.) S. Closely allied to *S. lindleyanum*, which it resembles in habit, foliage and fl., differing chiefly in having a pair of small white tubercles on the inner margin of the side lobes of the lip. Brazil.

Selenipedium Verdieri. (*J. O.* 1896, 100.) S. A garden hybrid between *S. caudatum Wallisii* and *S. Roezlii*.

Selenipedium vittatum. (*Ill. H.* 1876, t. 238.) S. epiphyte. L. 1 ft. long, linear-ligulate, acute, bright green, very distinctly margined with yellow. Scape 12–18 in. high, minutely puberulous, few-flowered ; sep. pale green, striped with red, the upper one only half as broad as the lower ; pet. linear, arcuate-deflexed, undulate, brownish red, lined with green towards the base ; labellum shorter than the lower sep. and half as long as the pet., brownish, inside green, spotted with red-brown. Brazil.

Selenipedium weidlichianum. (*G. C.* 1890, viii. 702.) S. A hybrid between *S. Hartwegii* and *S. Schlimii*, scarcely differing from *S. Sedeni*.

Sempervivum Greenii. (*G. C.* 1877, viii. 230.) Crassulaceæ. H. per. rock-work plant in the way of *S. calcareum*, but much smaller in all its parts. L. glaucous, with a distinct bright red-brown tip. Fl.-stem 4–5 in. high. Fl. red ; pet. densely pilose outside.

Sempervivum Moggridgei. (*B. M.* t. 6610.) H. A dwarf alpine species in the way of *S. arachnoideum*, with oblanceolate ciliate l. and cymose red fl. ½ in. in diam. Maritime Alps.

Sempervivum patens. (*Gfl.* t. 858, f. 2.) H. L. rosulate, obovate-oblong, abruptly cuspidate, glaucous, hairy. Fl. yellowish ; pet. erect. There is another form of this (var. *Heuffelii*) with green, glabrous or sparsely hairy l. East Europe.

Sempervivum Reginæ-Amaliæ. (*G. C.* 1877, viii. 230.) H. Rosettes and l. as large as in *S. Tectorum*. L. rich purple-brown in the upper half, shading into green below, glabrous, ciliated. Fl. stem 4–6 in. high. Fl. pale yellow, in a dense cyme. Pet. 6–7, obscurely tricuspidate, glandular-pilose on both surfaces. Greece.

Sempervivum Thomeyeri. (*W. G.* 1892, 117.) H. A garden hybrid between *S. hirtum* and *S. arachnoideum*.

Senecio chordifolius. (*B. M.* t. 6216.) Compositæ. G. succulent, with slender slightly branching glabrous stems about a foot high, bearing numerous terete acute pale green fleshy l. 7–10 in. long, drooping. Fl.-heads few, in a lax panicle, on long slender pedicels. discoid, yellow. South Africa.

Senecio concolor. (*G. C.* 1883, xx. 75; *B. M.* t. 6713.) H. H. A pretty herbaceous per., with narrow oblanceolate dentate radical l. and amplexicaul broadly linear stem-l., all glabrous. Fl.-stem 1–2 ft. high, laxly branched above; corymbs composed of 3–5 heads 1¼ in. in diam., with a mauve-purple ray and white disk; anthers purple. South Africa.

Senecio Galpini. (*B. M.* t. 7239; *J. of H.* 1892, 3.) G. A species of the section *Kleinia*. It forms a compact tuft of short barren stems and fleshy glaucous oblanceolate l. Fl.-stem leafy, 1 ft. high, ending in a lax corymb of brilliant orange fl. Transvaal.

Senecio Heritieri. (*G. and F.* 1891, 510, f. 79.) G. [Syn. *Cineraria aurita*, L'Hérit.] Canaries.

Senecio Hualtata. (*B. M.* t. 7422.) H. herb. L. mostly radical. Flowering stems 5 ft. high bearing numerous straw-coloured fl.-heads about 1 in. across. Argentina; Chile.

Senecio kleinioides. (*G. C.* 1894, xvi. 34.) G. Allied to *S. Anteuphorbium*, but with smaller fl.-heads and flat obovate-cuneate l. Abyssinia.

Senecio lagopus. (*G. C.* 1882, xvii. 424.) H. rockwork plant with broadly elliptic obtuse radical l. setose above, densely tomentose beneath. Fl.-stem 6–12 in. high; corymb lax, few-flowered; heads radiate, 1 in. in diam., bright yellow. New Zealand.

Senecio laxifolius. (*B. M.* t. 7378; *G. C.* 1894, xvi. f. 43, as *S. latifolius*.) H. A small much branched shr. with leathery oblong l. 2 in. long, green above, glaucous beneath; fl. in erect terminal panicles, yellow. New Zealand.

Senecio leucostachys. (*R. H.* 1893, 104, f. 37–8.) G. or H. H. An undershrub with white tomentose pinnatisect l. Uruguay.

Senecio multiflorus. (*G. C.* 1896, xix. 460, f. 67–9.) G. An ally of the Garden Cineraria (*S. cruentus*). It has a tall leafy stem branched above, with numerous heads of lilac purple fl. 1 in. across. [Syn. *Doronicum Bourgæi*, Sch. Bip.; B. M. t. 4994.] Canary Islands.

Senecio Palmeri. (*W. G.* 1890, 120, f. 24.) G. per. or H. annual. It is a branching plant 1–2 ft. high, densely clothed with a white felt; the l. are oblong-lanceolate, narrowed into a rather long stalk and slightly toothed. The fl. heads are few with yellow rays, and about 1 in. in diam. in a pedunculate corymb. Guadeloupe Island, Lower California.

Senecio sagittifolius. (*R. H.* 1892, 53, f. 16–17.) G. A species growing 7–10 ft. high, with a rosette of sagittate l. a yard long, crested along the midrib and a large terminal panicle of flower-heads each 1½ in. in diam., with a white ray and yellow disk. Uruguay.

Senecio speciosus. (*B. M.* t. 6488; *G. C.* 1879, xii. 615; 1880, xiv. 149, f. 34.) H. herb. per. Radical l. obovate-lanceolate, toothed or lobed, rather thick and more or less glandular-hairy. Fl.-stem 6–12 in. high, with oblong subamplexicaul l. Fl.-heads 1½ in. in diam., bright purple, few or several in a lax corymb. South Africa.

Senecio stenocephalus comosus. (*G. C.* 1881, xvi. 300, f. 55–6.) H. herb. per. Radical l. long-stalked, broadly-ovate-sagittate, acuminate. Fl.-stem 2 ft. high, with a dense narrow-oblong spike of yellow fl.-heads, each with three ray florets. The fl.-heads in the typical form have but one ray floret each. Japan.

Senecio subscandens. (*B. M.* t. 6363.) S. climber with cylindric succulent stems, alternate pinnatisect l. with 2–6 pairs of lateral lobes and one terminal lobe, deeply toothed, bright green, with pink veins. Panicles axillary. Fl.-heads small, yellow, in clusters at the ends of the branches of the panicle; florets all tubular, about 10 to each head. Tropical Africa.

Sequoia sempervirens variegata. (*R. H.* 1890, 330.) Coniferæ. H. A form with very glaucous and slightly variegated foliage.

Serapias papilionaceo-lingua. (*B. M.* t. 6255.) Orchidaceæ. H. terrestrial Orchid. Stem 1 ft. high or more. L. narrow, lanceolate, acuminate, pale green, unspotted. Spikes 5–6-flowered. Sep and pet. pale green and pale purple, veined; pet. erect, free, broad, spreading and recurved. Lip large,

broadly cordate; margins crenulate: base with two tubercles on the very short claw, bright purple. Natural hybrid. Southern France, &c.

Sericographis Mohintli. (*R. H.* 1886, 205.) Acanthaceæ. G. undershrub of bushy habit, with opposite elongate-ovate entire coriaceous l. and axillary orange-yellow fl. Corolla bilabiate, the elongate tube inflated above, the upper lip slightly arched and the lower lip curved in a spiral and 3-toothed at the apex. [*Jacobinia Mohintli*, Hemsl.] Mexico.

Serrastylis modesta. (*K. B.* 1894, 158; *G. C.* 1894, xvi. 726, f. 91.) Orchidaceæ. S. Genus allied to *Brassia*, with the habit of *Trichopilia*. Pseudobulbs linear-oblong, monophyllous; l. broadly lanceolate; raceme drooping, 5 in. long, clothed with numerous brown and yellow fl. 1 in. in diam. Colombia.

Sesbania exasperata. (*B. M.* t. 7384.) Leguminosæ. G. A shr. 8–10 ft. high, with slender branches, pinnate l. 6–10 in. long and short racemes of large papilionaceous fl. coloured golden yellow, with spots of red on the back of the standard. Tropical America.

Sewerzowia turkestanica. (*Gfl.* 1883, 250, f.) Leguminosæ. H. annual with imparipinnate l., having 6–10 pairs of small oblanceolate retuse leaflets and few-flowered racemes of small fl. partly concealed between a pair of stoutly fringed bracts. [*Astragalus Schmalhauseni*, Bunge.] Turkestan.]

Shortia galacifolia. (*G. and F.* 1888, 506, 509, f. 80; *B. M.* t. 7082.) Diapensiaceæ. H. per. A pretty and very interesting little plant with the habit of a *Pyrola*. L. all radical, broadly elliptic or roundish, obtuse, crenate, on long stalks. Scapes slender, 3–4 in. long, 1-flowered. Fl. 1 in. in diam., 5-lobed, with a short funnel-shaped tube. Carolina.

Sibthorpia europæa aurea. (*G. M.* 1895, xxxviii. 305.) Scrophulariaceæ. H. A var. with yellow foliage.

Sicana atropurpurea. (*R. H.* 1894, 108, t.) Cucurbitaceæ. G. This differs from *S. odorifera* in having purple-violet fruits. Paraguay.

Sicania odorifera. (*W. G.* 1889, 112; *R. H.* 1889, 35; 1890, 516, f.) S. A vigorous climber with monœcious yellow fl. and cylindric fr., something like a large cucumber, having a peculiar odour. Brazil.

Sicana spherica. (*B. M.* t. 7109.) Cucurbitaceæ. S. A vigorous climber with stout lobed l. and fleshy yellowish campanulate fl. 4 in. across. Fruit globose, as large as an orange. Jamaica.

Sidalcea candida. (*Fl. and P.* 1882, 12; *R. H.* 1891, 356, f. 85.) Malvaceæ. H. per. branched, 2–3 ft. high. L. roundish, 7-lobed, glossy, long-stalked. Fl. white, in terminal racemes. Colorado.

Sidalcea malvæflora Listeri. (*Gard.* 1896, l. 131.) H. A var. with blush-pink fl.

Sigmatostalix malleifera. (*G. C.* 1883, xx. 360.) Orchidaceæ. G. A curious little plant with the habit of a small *Oncidium*, with oblong pseudobulbs 1½ in. long, ½ in. broad, dark brown, bearing cuneate-ligulate light green l. 5 in. long by ½ in. broad and a slender raceme of yellow brown-spotted fl. The fl. develop at distant periods; sep. and pet. ligulate-triangular, acute; lip tripartite, the divisions linear, emarginate, callus hammer-like. Colombia.

Silphium albiflorum. (*B. M.* t. 6918; *R. H.* 1887, 192.) Compositæ. H. per. 2–4 ft. high, scabrid. L. pinnatisect. Heads in the axils of the upper stem-l., radiate, 3½ in. in diam., creamy white. Texas.

Simaruba Tulæ. (*Gfl.* t. 1298.) Simarubaceæ. S. shr. or tree with pinnate l. and corymbs of bright carmine fl. The leaflets are elliptic-oblong and shortly pointed; the petioles and branches of the corymb are purple-tinted and the fl. are about ⅓ in. in diam. Porto Rico.

Sisyrinchium filifolium. (*B. M.* t. 6829; *G. C.* 1885, xxiii. 696, f. 155.) Iridaceæ. H. A charming little plant with densely-tufted fibrous roots, slender linear l. and slender stems bearing a cluster of pretty white fl.; fl. veined with pink, 1 in. in diam. Falkland Islands.

Skimmia Foremanni. (*Fl. and P.* 1881, 70; *G. C.* 1888, iv. 709, 735; 1889, v. 525, f. 94.) Rutaceæ. H. A garden form of *S. japonica*.

Skimmia fragrans. (*R. H.* 1880, 56, f. 11.) Rutaceæ. H. About 3 ft. high, with elliptic oblong thick l. and terminal panicles of white fragrant fl. A form of *S. japonica*.

Skimmia oblata Veitchii. (*R. H.* 1878, 240.) H. Differs from the type in its larger l. with a redder midrib and more coloured buds. A form of *S. japonica*.

Smilax argyrea. (*Ill. H.* 1892, t. 152.) Liliaceæ. S. climber with prickly stems and lanceolate acuminate l. variegated with white spots. Bolivia.

Smilax auriculata. (*Bull Cat.* 1884, 17.) G. or H. H. An evergreen climber with slender striate stems beset with short white recurved spines, and glossy green sub-hastate l.

Smilax discolor. (*Bull Cat.* 1886, 9.) S. climber with variegated foliage. L. oblong-ovate, suddenly acuminate, 9 in. long by 4 in. broad. of a rich green blotched in the young state with purple-brown. Mexico.

Smilax glyciphylla. (*Gfl.* 1888, 343–4, f. 74.) G. climber, with smooth stems, lanceolate, acuminate 3-nerved l. shining green above, greyish green beneath, and clusters of globose black berries. Australia.

Smilax Pseudo-china. (*G. and F.* 1888, 249.) H. Climber with unarmed stems, large ovate acute l. subcordate and then shortly cuneate at the attachment of the petiole and long-stalked umbels of greenish fl. succeeded by black berries. North America.

Smilax Shuttleworthii. (*Bull Cat.* 1877, 7.) S. climber with large cordate acuminate l., which are 7-nerved, deep green, marked with confluent blotches of silvery grey; young l. purplish at back; petioles curiously deflexed at base. Colombia.

Sobolewskya clavata. (*Gard.* 1892, xli. 484.) Cruciferæ. H. herb. per. bearing numerous corymbs of pure white fl. Armenia.

Sobralia amesiana. (*O. R.* 1895. 203.) Orchidaceæ. S. A garden hybrid between *S. xantholeuca* and *S. Wilsoni*.

Sobralia beyeriana. (*Gard.* 1892, xlii. 324.) S. A dwarf plant 18 in. high, with broad l. and fl. 5 in. across, white, tinged with pink; lip large, wavy, rosy lilac with a yellow throat.

Sobralia Brandtiæ. (*G. C.* 1896, xix. 608.) S. Habit of *S. macrantha*. L.-sheaths marked with black spots; fl. from a cone-like head; sep. and pet. linear-oblong, rose-purple; lip convolute; disk yellow, margins wavy. South America.

Sobralia Cattleya. (*G. C.* 1877, vii. 72.) S. Stem stout, bearing shining oblong acuminate plaited l. and several lateral infl. of *Cattleya*-like fl. Sep. and pet. purplish brown; lip purplish, with 3 yellow crested keels, and forming a sharp angle by its lateral lobes overlapping the column. Colombia.

Sobralia leucoxantha. (*W. O. A.* t. 271; *B. M.* t. 7058.) S. L. lanceolate, acuminate, plicate; fl. large, white, with the throat and disk of the lip deep yellow, marked with orange-red lines in the tube. Costa Rica.

Sobralia Lindeni. (*G. and F.* 1895, 444; *O. R.* 1896, 367.) S. Stems shorter than in *S. macrantha*; fl. 10 in. in diam.; sep. and pet. white, tinted with rose; lip crimson-purple in front, white in the folded portion, with a few chocolate lines in the throat. Ecuador.

Sobralia Lowii. (*G. C.* 1890, viii. 378; *H. G.* 1890, 553.) S. Stems 12–18 in. high; fl. uniformly bright purple. It is allied to *S. sessilis*. Colombia.

Sobralia lucasiana. (*G. C.* 1892, xi. 816.) G. Probably a var. of *S. macrantha*. Fl. large, with white and lilac segments; lip lilac. with a yellow blotch at the base.

Sobralia macrantha Hodgkinsoni. (*O. R.* 1894, 236.) G. var. with large lilac fl.; lip brilliant rose-purple and orange.

Sobralia macrantha kienastiana. (*G. C.* 1888, iv. 296; 1891, ix. 741.) G. A white-flowered var. with a small yellow mark on the lip.

Sobralia macrantha nana. (*R. H.* 1882, 405.) G. A dwarf form with smaller fl. than in the type; lip dark violet, yellow at the base.

Sobralia Sanderæ. (*G. C.* 1890, viii. 494; *H. G.* 1890, 555.) S. Allied to *S. leucoxantha*, but the fl. larger and without the orange markings in the throat. Central America.

Sobralia sessilis. (*B. M.* t. 7376.) S. Described by Dr. Lindley in 1841, but not known in cultivation till now, the plant hitherto cultivated and figured, *B. M.* t. 4570, under this name being *S. decora*. The true *S. sessilis* has stems 2–4 ft. high, with red tubercles at the base, ovate-lanceolate l., green above, purplish beneath, and sessile fl. 3 in. across, rose red, with a crimson lip. British Guiana.

Sobralia suaveolens. (*G. C.* 1878, ix. 622.) S. In habit like *S. decora*; fl. richly perfumed, pale yellow; lip white, brown on the disk of the front lobe; keels yellow. Central America.

Sobralia Veitchii. (*G. C.* 1894, xvi. 103.) S. A garden hybrid between *S. xantholeuca* and *S. macrantha*.

Sobralia Wilsoni. (*G. C.* 1890, viii. 378; *H. G.* 1890, 554.) S. A near ally of *S. Warscewiczii*. Fl. large, white. suffused with rose, blotched with yellow on the lip. Central America.

Sobralia xantholeuca. (*W. O. A.* t. 250; *B. M.* t. 7332.) S. A distinct and showy species with broad lanceolate acute plicate dark green l. and very large fl. with spreading sulphur-yellow sep. and pet. and a large crumpled lemon-yellow lip with a deeper yellow throat striped with orange-red.

—— **Var. alba.** (*G. C.* 1889, vi. 111.) S. A var. with pale primrose-coloured fl.

Solanum acanthodes. (*B. M.* t. 6280.) Solanaceæ. S. shr., clothed with a mealy pubescence and everywhere except on the fl. armed with straight prickles. Stems. midribs and pedicels rufous-orange. L. about 1 ft. long, ovate-oblong, pinnatifidly lobed. dull green. Fl. large, light purple, in 6–10-flowered scorpioid cymes. Brazil?

Solanum albidum Poortmanni. (*R. H.* 1886, 232, f. 67.) H. H. herb with large pinnatifid l. 2 ft. long, bright green above, white-tomentose beneath. Fl. small, white, produced in numerous cymes towards the end of the season on the young white-tomentose shoots. Andes.

Solanum betaceum coccineum. (*R. H.* 1881, 470, t.) A var. with orange-red fruit of the ordinary "Tree Tomato" *Cyphomandra betacea*, Sendt.

Solanum ciliatum macrocarpum. (*R. H.* 1888, 78, f. 16; *B. T. O.* 1888, 117.) H. H. A var. with fr. 1½ in. in diam.

Solanum coronatum. (*W. G.* 1892. 30.) G. or H. H. A much-branched leafy species growing about a yard high, with dark green pinnatifid l. and armed with violet and grey prickles. Fruit as large as a plum, variegated.

Solanum crinitum. (*W. G.* 1889, 362.) H. H. per. 6–8 ft. high; stem, petioles and infl. densely clothed with flexible yellowish brown bristles; l. large elliptic, obtusely sinuate-lobed, tomentose beneath; fl. in large clusters, large and showy, deep blue, with five darker lines. Quito.

Solanum dammannianum. (*Acta Hort. Petrop.* 1890, xi. 311; *Damm. Cat.* 1890–91, 80–81, f. 2.) G. A robust plant growing to 8 or 9 ft. high. Stems covered with stipitate stellately branched hairs; l. large, cordate-ovate, with wavy sinuate borders, tomentose on both sides. Fl. in clusters, large, dark blue, succeeded by yellow berries.

Solanum duplosinuatum. (*W. G.* 1892, 477, f. 79.) S. A fine tall-growing plant with large pinnatifid l. of a clear green, suffused with bronze-colour and armed with yellow prickles; fl. large, blue; fr. white. Abyssinia.

Solanum Duchartrei. (*W. G.* 1890, 367.) S. shr. growing to about 20 in. high. prickly in all parts, with sinuately lobed l.; fl. purple, hairy on the outside. West Tropical Africa.

Solanum Farini. (*W. G.* 1896, 405, f. 59.) G. A strong-growing blue-flowered spiny species allied to *S. duplosinuatum*. Africa.

Solanum guineense. (*W. G.* 1889, 82.) H. H. annual of rapid growth, 2–4 ft. high, with angular stems; l. ovate; fl. small, violet, succeeded by dark shining blackish blue fr. West Africa.

Solanum hybridum Hendersonii. (*R. H.* 1878, 425.) G. Much resembling *S. Pseudocapsicum*, producing abundant white fl. succeeded by orange-red ovoid fr.

Solanum Jamesii. (*B. M.* t. 6766.) H. H. Very similar to the common potato, but smaller and producing very small tubers and white fl. Mexico; Arizona.

Solanum Maglia. (*B. M.* t. 6756.) H. Very similar to *S. Jamesii*. Chile.

Solanum jasminoides floribundum. (*R. H.* 1885, 543.) H. H. or G. climber. A var. with smaller and less pinnatifid l. and more floriferous than the type.

Solanum Mors-elephantum. (*W. G.* 1894, 29, f. 7.) G. A bush about a yard high with dark green violet-stalked lyrate l. and bright blue fl. followed by large depressed globose canary-yellow fr. Tropical Africa.

Solanum muticum. (*K. B.* 1894, 6; *Gn.* t. 1491.) G. Similar in habit to *S. lentum*. Fl. violet-blue; fruits reddish, about the size of a hazel nut. A bush attaining a height of 4½ ft., previously cultivated in England, but lost for some 20 years until re-introduced. Paraguay.

Solanum Ohrondii. (*R. H.* 1883, 498, f. 99, 100; 1884, 115.) H. This is merely *S. Commersonii* redescribed. Argentina.

Solanum pensile. (*B. M.* t. 7062.) S. climber, with cordate l. and large pendent racemes of bright blue fl. with conspicuous yellow stamens. Brazil.

Solanum quercifolium. (*R. H.* 1880, 331.) H. H. A large ornamental species with deeply cut l. and large violet fl.

Solanum texanum ovigerum. (*Vilmorin Cat.* 1894, 13, f.; *Jard.* 1894, 29, f. 11.) G. A half-shrubby per. with the habit of *S. texanum* but with ovoid fr. as large as an egg, bright red when ripe.

Solanum Torreyi. (*B. M.* t. 6461.) H. A free-flowering herb. per. more or less prickly. L. 2–3 in. long, ovate, with a cordate or hastate base, sinuately lobed, mealy beneath. Fl. in terminal few-flowered racemes, nodding, 2 in. in diam., purple.

Solanum venustum. (*G. C.* 1881, xiv. 726.) S. climber. Lower l. and those of the infl. pinnately trifoliolate, the others ovate-lanceolate, entire. Panicles 4–6 in. long, drooping. Fl. ¾ in. in diam., delicate mauve. [*S. seaforthianum*, Andr.] Brazil.

Solanum Wallisii. (*R. H.* 1877, 291.) S. or G. shr. of compact bushy habit. L. simple, lanceolate, acuminate, entire, 3–4 in. long, 1½–2 in. broad, dark purplish green: stems, petioles, nerves and peduncles blackish violet. Fl. purple, 1–1½ in. in diam., in lax pedunculate cymes. Fr. edible, large, plum-like, violet, marbled and spotted with paler colour. Peru.

Solanum Wendlandii. (*B. M.* t. 6914; *R. H.* 1887, 192.) S. A handsome climbing shr. with prickles on the stem and petioles. L. variable, 2–10 in. long, 1½–4 in. broad, entire, oblong, acuminate, with a cordate base, or 3-lobed, pinnatifid, or pinnate. Fl. in large terminal cymes, pale lilac-purple, 2–2½ in. in diam. Costa Rica.

Solidago Drummondii. (*B. M.* t. 6805.) Compositæ. H. herb. per. with branching stems 4–5 ft. high, elliptic acute serrate l. and a lax panicle of small yellow flower-heads. East United States.

Sophora japonica hybrida. (*R. H.* 1893, 37.) Leguminosæ. H. A tree only differing from the typical weeping *Sophora* in the strong horizontally spreading main branches and in the long thin pendulous smaller ones.

Sophora platycarpa. (*M. D. G.* 1896, 27.) H. In habit and general aspect scarcely distinguishable from *S. japonica*, but differing markedly in its fr. Japan.

Sophro-cattleya batemaniana. (*Journ. Linn. Soc.* xxiv. 156; *Veitch. Man. Cattl.* 92, f.) S. [Syn. *Lælia batemaniana*, Reichb. f.]

Sophro-cattleya eximea. (*G. C.* 1894, xvi. 378.) G. A garden hybrid between *Sophronitis grandiflora* and *Cattleya bowringiana*.

Sophro-cattleya Veitchii. (*G. C.* 1892, xii. 312.) G. A garden hybrid between *Lælio-cattleya elegans* and *Sophronitis grandiflora*.

Sophro-lælia Marriottii. (*G. C.* 1896, xx. 667.) Orchidaceæ. G. A garden hybrid between *Sophronitis grandiflora* and *Lælia flava*.

Sophronitis grandiflora aurantiaca. (*R. H.* 1886, 492, t.) Orchidaceæ. G. A var. with dark orange-red fl.

—— Var. **purpurea.** (*Veitch Man. Cattl.* 106.) G. A var. with bright rose-purple fl. [*S. purpurea*, Reichb. f.]

—— Var. **rosea.** (*Veitch Man. Cattl.* 106.) G. A var. with bright rose-purple fl.

Sophronitis purpurea. (*G. C.* 1878, ix. 462.) G. [*S. grandiflora*, Hort. var. *purpurea*.] Brazil.

Sonerila orientalis and varieties **guttulata, picta,** and **punctata.** (*Bull Cat.* 1890, 8, f.) Melastomaceæ. S. per. producing a profusion of bright rose or purple fl. with yellow anthers. The l. are broadly ovate, acute, with a cordate base, and in the different varieties are of a crimson maroon, with or without a feathered whitish central band, or dotted with white on a light or dark green ground. Arakan Hills, Burma.

Sorbus Aria chrysophylla. (*W. G.* 1891, 128.) Rosaceæ. H. tree. A garden var. with yellow foliage. [*Pyrus Aria*, Sm. var.]

Sorbus Aucuparia atropurpurea. (*R. H.* 1889, 114.) H. A form with large corymbs of fl. and very large fr. of a dark red. [*Pyrus Aucuparia*, Gaertn. var]

—— Var. **foliis aureis.** (*R. H.* 1886, 399.) H. An ornamental form, having the thickish tomentose leaflets marked with yellow, which deepens with age.

—— Var. **rossica, fructu dulci.** (*M. D. G.* 1896, 28.) H. A form of the Mountain Ash with edible fruits. Introduced from Russia.

Sorbus discolor. (*G. C.* 1891, ix. 462.) H. A small tree allied to the White Beam, *Pyrus Aria*. [*Pyrus*.] East Siberia.

Sparmannia africana, flore pleno. (*Bull Cat.* 1881, 20.) Tiliaceæ. G. shr. A var. with double fl.

Spathantheum heterandrum. (*G. C.* 1883, xx. 70.) Araceæ. G. tuberous per. [Syn. *Gamochlamys heterandra*, Baker; *S. orbignyanum*, Schott.] Tropical America.

Spathiphyllum candidum. (*G. C.* 1878, x. 783; *Fl. and P.* 1879, 18.) Araceæ. S. This is the plant described in the Year-book, 1876, 130, as *Anthurium candidum*.

Spathiphyllum cannæfolium. (*G. C.* 1879, xi. 268, f. 37.) S. Correct name of the plant cultivated as *Anthurium Dechardi*.

Spathiphyllum hybridum. (*Ill. H.* 1882, t. 450.) S. A garden hybrid between *S. cannæfolium* (*S. Dechardi*) and *S. Patini*.

Spathoglottis Augustorum. (*Cat. Comp. Cont. d'Hort.* 1886, 5; *G. C.* 1886, xxv. 9; *L.* i. t. 25.) Orchidaceæ. S. A fine species with ovoid brown tinted pseudobulbs, broad cuneate-oblong acute l. and a nearly capitate raceme of pale lilac fl. Lip tripartite; side-lobes rectangular, retuse; mid-lobe long, clawed, oblong and 2-lobed at the apex. [*S. Vieillardi*, Reichb. f.] Polynesia.

Spathoglottis gracilis. (*B. M.* t. 7366.) S. This plant is grown in gardens for *S. aurea*, which it resembles in every character except in having a broader-lobed and differently formed lip. The fl. are 2 in. wide, bright yellow, with a few streaks of red on the inside of the lip. Borneo.

Spathoglottis kimballiana. (*G. C.* 1888, iv. 92, 93, f. 9; *G. and F.* 1888, 124, 224; *B. M.* t. 7443.) S. A species with large golden yellow fl. and the dorsal surface of the sep. mottled with red-brown striæ. Borneo.

Spathoglottis Lobbii. (*G. C.* 1876, v. 534; 1882, xviii. 532, f. 92.) S. terrestrial orchid with a slender firm loosely hairy distantly sheathed peduncle bearing a lax raceme of long-stalked sulphur-yellow fl. about 1 in. in diam.; lateral sep. streaked with 3–4 brown lines. Burma.

Spathoglottis pacifica. (*G. C.* 1883, xix. 340; *Fl. and P.* 1883, 58.) S. Pseudobulbs conical; l. oblong-lanceolate, plaited; fl. racemose. Ovaries stalked, velvety. Sep. and pet. oblong, obtuse, whitish lilac, with darker margins.

Lip with two curved blunt side-lobes, lilac, edged with yellow, and a stalked reniform undulate front-lobe with an orange disk; stalk with two white tubercles on its base. Pacific Islands.

Spathoglottis Petri. (*G. C.* 1877, viii. 392; *B. M.* t. 6354.) S. Peduncle 2 ft. long, green, becoming purplish at the top; sheaths brown; bracts large, conspicuous. Sep. ligulate, acute: pet. much broader, both dark lilac; lip trifid, purple, with a white disk and a rhomboid callosity with 3 furrows and 2 lines of long hairs between the side lobes, ochre-yellow. South Sea Islands.

Spathoglottis Regnieri. (*G. C.* 1887, i. 174.) S. Allied to *S. Lobbii*, but with broader l. and smaller light yellow fl. having the side lobes shorter and broader, the callus, which is white with brown spots, standing more backwards, and no cilia on the basal angles of the long stalk. Cochin China.

Spathoglottis Vieillardi. (*B. M.* t. 7013; *G. C.* 1888, iv. 300.) This is an older name for *S. Augustorum*.

—— Var. **rubra.** (*G. C.* 1892, xii. 566; *J. of H.* 1892, xxv. 529, f. 70.) S. A var. with larger and darker coloured fl. than the type.

Spergula pilifera aurea. (*Fl. and P.* 1882, 107.) Caryophyllaceæ. H. A var. with yellow foliage.

Sphæralcea Emoryi. (*Gfl.* t. 1266, f. 1.) Malvaceæ. H. per. 1–2 ft. high. L. petiolate, broadly ovate, pinnatifidly lobed and toothed. Fl. several together from the axils of the l., small, orange-red, on slender pedicels. California.

Sphærolobium grandiflorum. (*B. M.* t. 7308.) Leguminosæ. G. The long rush-like branches clothed with small linear l. and terminated by graceful racemes of bright yellow and red fl. West Australia.

Spinovitis Davidii. (*R. H.* 1885, 55, f. 10.) Ampelidaceæ. G. species with spiny stems and petioles, broad cordate palmately lobed and toothed l., and bunches of black or white grapes 3–4 in. long. [*Vitis.*] North China.

Spiræa bullata. (*G. C.* 1882, xviii. 680; *Fl. and P.* 1883, 11) Rosaceæ. H. A dwarf. shr. 1–1½ ft. high. with wiry downy reddish brown branches. small subsessile glabrous bullate l., and dense terminal corymbs of dark pink fl. Japan.

Spiræa Bumalda ruberrima. (*W. G.* 1891. 460; *Gard.* 1891, xl. 415.) H. A garden hybrid between *S. japonica Bumalda* and *S. bullata*.

Spiræa Fortunei rubra. (*R. H.* 1882, 100, t.) H. shr. A var. with dark red fl. [*S. japonica*, Sieb. var.] Japan.

Spiræa kamtschatika. (*G. C.* 1889, vi. 126; *Gard.* 1889. xxxvi. 148.) H. Herb. per. of stately growth. Stems 4–10 ft. high; l. 6 in. wide, 4 in. long; leaf-stalk channelled, coarsely hairy, provided with two leafy stipules at the base and a number of irregular leaflets along its entire length; terminal leaflet broadly ovate-cordate, palmately five-lobed, lobes biserrate and pointed; infl. large; fl. white, fragrant. [*S. gigantea*, Hort.] Kamtschatka.

Spiræa media rotundifolia. (*G. C.* 1885, xxiii. 283, f. 56.) H. shr. with elliptic l. 3-toothed at the apex. and globose umbels of white fl. [*S. bracteata*, Zabel; *B. M.* t. 7429.] Japan.

Spiræa opulifolia heterophylla, foliis aureo-marginatis. (*Gfl.* 1890, 9, f. 2–3.) H. shr. An ornamental var. with irregularly lobed l. variegated with yellow.

Spiræa palmata elegans. (*Fl. and P.* 1878, 41, t. 463.) H. herbaceous plant with pinnatisect l. and large paniculate corymbs of white fl. with red anthers. Said to be a hybrid between *S. palmata* and *Astilbe japonica*.

Spiræa pubescens. (*G. and F.* 1888, 330, f. 52.) H. A pretty free-flowering dwarf shr. with rather small ovate-oblong obtuse l. toothed above the middle, puberulous above, densely villous-pubescent beneath, and numerous umbels of white fl. placed in close array on very short lateral shoots, along the slender zigzag branches. North China.

Spiræa Van-Houttei. (*G. and F.* 1889, 317, f. 117.) H. A garden hybrid between *S. media* and *S. trilobata* which is largely cultivated as a forcing plant under the name of *S. confusa*.

Spiranthes albescens. (*Gfl.* 1890. 607.) Orchidaceæ. S. An older name for *S. leucosticta*.

Spiranthes colorata maculata. (*Fl. and P.* 1883, 42; *G. C.* 1883, xix. 210.) S. This is the old *Stenorynchus speciosus*, a genus now merged into *Spiranthes*. The var. has the l. variegated with light green spots on a darker ground. Colombia.

Spiranthes euphlebia. (*B. M.* t. 6690.) S. terrestrial Orchid. with light green l. indistinctly spotted with white, and a long-peduncled raceme of large whitish fl. striped with brown. Brazil.

Spiranthes leucosticta. (*Gfl.* 1885, 243.) S. terrestrial Orchid with petiolate oblong acute white-spotted l. and a few-flowered raceme of hairy green fl. with a brown-tipped lip. Sep. lanceolate; pet. linear; the pet. and dorsal sep. forming together the galea; lip ligulate, dilated in front, the apex obtusely triangular. Colombia.

Stachys maweana. (*B. M.* t. 6389.) Labiatæ. H. herb covered with a hoary tomentum. L. petiolate, cordate, crenate, about 1 in. long, spreading. Fl. pale sulphur. spotted on the lower lip with purple, disposed in terminal spikes. Morocco.

Stachys tuberifera. (*G. C.* 1888, iii. 211, 13, f. 1; *R. H.* 1887, 290; *G. and F.* 1888, 4; *Gfl.* 1888, 99.) H. per. something in the way of *S. arvensis*, producing numerous tubers, used as a vegetable. When first introduced it was thought to be *S. affinis*, but was considered subsequently to be distinct. [*S. Sieboldi*, Miq.] North China; Japan.

Stanhopea amesiana. (*G. C.* 1893, xiii. 518; *G. M.* 1893, 352, f.) Orchidaceæ. S. A handsome plant with large white waxy fl.; lip thick and hornless. It is probably a var. of *S. Lowii*.

Stanhopea bellærensis. (*G. C.* 1895, xviii. 100.) A garden hybrid between *S. insignis* and *S. oculata*.

Stanhopea florida. (*G. C.* 1879, xii. 615.) S. Fl. large, white, with small purple spots on the inside of the sep. and pet. The lip is covered with small purple dots, and on each side between the two keels there is a large blotch. Mexico.

Stanhopea graveolens Lietzei. (*Gfl.* t. 1345.) S. A var. with the sep. and pet. of a more decided yellow and the orange mark on the hypochile of the lip replaced by a faint red band; front lobe of the lip white, dotted with purple. Brazil.

Stanhopea insignis flava. (*G. C.* 1880, xiv. 326.) S. The lip and column are like the type, white tinged with yellow. The fl. is very large, reminding one of *S. tigrina*.

Stanhopea Lowii. (*K. B.* 1893, 63; *G. C.* 1893, xiv. 630, 689, f. 107.) S. A striking species of the *S. ecornuta* section, having purple spots on the hypochile and whitish buff sep. and pet. Colombia.

Stanhopea moliana. (*L.* vii. t. 331.) S. Allied to *S. Ruckeri* and *S. Wardii*. The sep. are yellowish white and the pet. white, all marked with annular rose-coloured spots; lip white, dotted with purple. Peru.

Stanhopea nigripes. (*K. B.* 1894, 364.) S. Allied to *S. Wardii*, which it resembles in all parts except the lip; sep. and pet. yellow, with many small purple blotches and a pair of black eye-like spots on the hypochile, the cavity being also black.

Stanhopea pulla. (*G. C.* 1877, vii. 810.) S. A small-flowered species with short conical ribbed dark pseudobulbs. Peduncle short, strong, 2-flowered. Fl. apricot-yellow; lateral sep. oblong, acute, reflexed; upper sep. narrower. Pet. shorter, narrower, ligulate, acute, very bright yellow. Lip shining, shoe-shaped with a roundish knob at its top, with sharp semi-oblong side-borders, and a squarish body with 4 keels inside, converging into the letter V, with an inconspicuous transverse slit between it and the apical knob. The knob is white, the side borders and V-like keels brownish purple. Costa Rica.

Stanhopea reichenbachiana. (*G. C.* 1879, xii. 40.) S. A curious species in the way of *S. eburnea*, but larger and more conspicuous. Fl. delicate shining white; the sep. and pet. becoming ochre-coloured and the hypochile rosy. Hypochile semi-globose, prolonged on the superior border into an angle: mesochile solid, with a deep channel abrupt in front: epichile triangular, rather convex. Colombia.

Stanhopea Shuttleworthii. (*G. C.* 1876, v. 795.) S. Allied to *S. insignis*. Sep., pet. and basal part of lip apricot-colour, with dark purple blotches;

front part of lip whitish yellow, with dark purple spots on the anterior blade. Column whitish, with a green middle part, spotted with purple inside. Colombia.

Stanhopea spindleriana. (*Gfl.* t. 1335; *H. G.* 1890, 552.) S. A garden hybrid between *S. oculata* and *S. tigrina*.

Stanhopea tricornis. (*G. C.* 1878, x. 810.) S. A curious species with small pseudobulbs and a pendant peduncle bearing 2 large fl. Dorsal sep. reflexed over the ovary; lateral sep. spreading; pet. entirely covering the lip, which has a nearly half-globular hypochile, ligulate acute horns with a tooth on the lower side, and an oblong retuse epichile with a triangular depressed obscurely-toothed blade at its base. Fl. whitish ochre with darker tips and crimson spots on the disk and the base of the pet. and sep.: hypochile with white longitudinal lines outside, rough and with purple dots inside; horns and epichile orange-ochre.

Stapelia albicans. (*W. G.* 1894, 235, f. 29.) Asclepiadaceæ. G. [An albino form of *S. angulata*, Todaro.]

Stapelia Bayfieldii. (*G. C.* 1877, vii. 430, f. 66.) G. The species long cultivated under this name is first described and figured here. South Africa.

Stapelia desmetiana. (*G. C.* 1889, vi. 684; *Icones Plantarum*, t. 1916.) S. A free-growing large-flowered plant, which had not been described before 1889, but had been in cultivation about 16 years.

Stapelia erectiflora. (*G. C.* 1889, vi. 650; *Icones Plantarum*, t. 1921.) G. A small free-flowering plant with erect pedicels and small Turk's cap-like fl. South Africa.

Stapelia gigantea. (*G. C.* 1877, vii. 684, 693. f. 112; *B. M.* t. 7068.) S. The finest of the genus. Stems resembling those of *S. Plantii*. Fl. enormous. 12–14 in. across, pale yellow, covered with irregular brownish lines, and suffused with red around the corona: the surface is rugose and sparsely covered with short pale hairs, the margins of the lanceolate acuminate lobes being fringed with similar hairs. Corona dark purple-brown. Zululand, Transvaal, Nyasaland, &c.

Stapelia glabriflora. (*G. C.* 1876, vi. 809, f. 149.) G. succulent with 4-angled erect pubescent stems 4–8 in. high. Pedicels ½ in. long, pubescent. Corolla deeply 5-lobed; lobes lanceolate, acuminate, at first spreading 3–4 in. in diam., afterwards strongly reflexed; the face entirely glabrous, without a fringe, dull purple-red, with numerous transverse yellowish white lines. Corona dark purple-brown; ligulæ linear, concave; apex recurved, obtuse, with a minute tooth. Alæ free to the base, divergent, oblong, acute. Rostra subulate, diverging, hooked at the apex. Cultivated as *S. grandiflora minor*. South Africa.

Stapelia grandiflora lineata. (*G. C.* 1877, vii. 558, f. 85.) G. succulent, only differing from the type in being marked across the basal half of the lobes with yellow lines. South Africa.

Stapelia longidens. (*G. C.* 1895, xviii. 324; 1898, xxiv. 7, f.) G. Allied to *S. Woodii*. Stems 6 in. long, 4-angled; the angles with long ascending stout teeth 1 in. long; fl. in sessile cymes, 1½ in. in diam., greenish-yellow, spotted with purple. Delagoa Bay.

Stapelia Massoni. (*G. C.* 1883, xx. 761.) G. An old inhabitant of our gardens, but never before described. Stem 4-angled, pubescent: fl. 4–4½ in. in diam., brown-purple, with a few narrow yellowish lines on the glabrous lobes, and the disk thickly covered with fine short purple hairs; the lobes ciliate with long purple hairs. South Africa.

Stapelia namaquensis. (*G. C.* xviii. 648: *Icones Plantarum*, t. 1908.) G. One of the handsomest of the group, with thick glabrous mottled stems and large bright yellow fl. with crowded and more or less confluent dark purple-brown spots; lobes very rugose; annulus very thick and solid-looking; corolla-lobes not fringed; lobes of the outer corona entire and acute.

—— Var. **tridentata.** (*G. C.* 1882, xviii. 648.) G. Corolla-lobes fringed with short hairs: outer corona-lobes truncately 3-toothed at the apex. Namaqualand.

Stapelia patentirostris. (*G. C.* 1877, vii. 140, f. 21.) G. A pretty species with rather slender stems puberulous and toothed as in its allies. Fl. 1-3 together; pedicels 1½ in. long. Corolla

2½–3½ in. in diam.; lobes lanceolate, acuminate; face rugose, dark rich purple-brown, with numerous transverse yellowish lines on the basal part of the lobes; the centre densely villose with rich purple-red hairs; the lobes fringed with long pale purple hairs. Ligulæ linear, lanceolate, obtuse with a central tooth. Alæ linear-oblong, horizontal. Rostra subulate, horizontally recurved over the alæ, reaching nearly to the sinuses of the corolla. South Africa.

Stapelia pulchella. (*G. C.* 1882, xviii. 199; *Fl. and P.* 1882, 140.) G. Stems like those of *S. bufonia*; fl. light yellow, dotted with purple-brown. Annulus small, raised about ½ line above the general surface. South Africa.

Stapelia Scylla. (*W. G.* 1894, 234, f. 30.) G. A form similar to *S. variegata*, but with spots confluent into longitudinal stripes.

Stapelia tsomoensis. (*G. C.* 1882, xviii. 168; *Icones Plantarum*, t. 1918.) G. succulent with square glabrous stems and several-flowered sessile cymes of dull smoky-purple fl. 3 in. in diam. Tsomo River, South Africa.

Stapelia unguipetala. (*G. C.* 1877, vii. 334, f. 54.) G. Allied to *S. patentirostris*, but the fl. are larger, 4–4½ in. in diam., rich purple-brown, marked two-thirds the way up the lobes with transverse yellowish lines; the centre of the disk and 5 bands radiating to the sinuses, pale greenish ochre; lobes lanceolate-attenuate, incurved-hooked at the apex, fringed with long pale purplish hairs; disk covered with long silky purple-red hairs, and the rest glabrous. Ligulæ lanceolate, acute: rostra subulate. recurving: alæ deltoid-oblong obtuse, free, divergent, all dark purple-brown. South Africa.

Staphylea Coulombieri. (*R. H.* 1887, 462.) Sapindaceæ. H. Said to be a hybrid between *S. pinnata* and *S. colchica*.

Statice eximia turkestanica. (*Gfl.* t. 1270, f. d.-m.; *G. C.* 1888, iii. 564.) Plumbaginaceæ. H. per. with a rosette of lanceolate acute l. 6–8 in. long by 1½–2 in. broad, and several branching fl.-stems 2–2½ ft. high, with short dense spikes of lilac fl. ending the branches. Turkestan.

Statice floribunda. (*Fl. and P.* 1882, 107.) G. In the way of *S. profusa*, with immense heads of violet-blue fl.

Statice kaufmanniana. (*Gfl.* t. 996.) H. herb. per. L. all radical, lanceolate, acuminate, crisped, with thick margins. Scape 6–16 in. long, bearing several ascending spikes of pink fl. Turkestan.

Statice leptoloba. (*Gfl.* t. 1045.) H. per. herb of tufted habit. L. all radical, oblanceolate-spathulate. Fl.-stems repeatedly forked, slender. Fl.-spikes about ½ in. long, few-flowered; calyx purple, stellate, infundibuliform; corolla small, yellowish. Turkestan.

Statice superba. (*Gfl.* 1887, 666, f. 170.) H. annual resembling *S. Suworowi*, but with the spikes densely crowded into a pyramidal panicle.

Statice Suworowi. (*G. C.* 1883, xx. 392–3, f. 59; *Gfl.* t. 1095, f. 1–2; *B. M.* t. 6959.) H. annual with oblong-lanceolate entire or coarsely runcinate-toothed radical l. and branched dense spikes of pretty lilac fl. Turkestan.

Stauntonia hexaphylla. (*G. C.* 1876, v. 598.) Berberidaceæ. H. H. shr. of climbing habit. L. digitate; leaflets 6, firm, deep green, elliptic-ovate, acute. Fl. white, fragrant, in axillary few-flowered racemes. Japan.

Stauropsis philippinensis. (*O. R.* 1894, 308.) Orchidaceæ. S. Described in 1845, but only at the above date introduced into cultivation. Stem erect, climbing, with elliptic-oblong l. 1½ in. long; fl. 1 in. across, solitary, from the axils of the l.; sep. and pet. red-brown; lip purple and white, with a hairy keel. Philippines.

Stauropsis warocqueana. (*L.* vii. t. 319.) S. A beautiful species with rich racemes of moderate-sized fl. Sep. and pet. yellow dotted with pale red-brown; lip white, spotted with rose. New Guinea.

Stelis Bruchmuelleri. (*B. M.* t. 6521.) Orchidaceæ. S A small but pretty free-flowering species with elliptic-lanceolate l. and slender spikes of bracteate dark purple fl. Andes.

Stelis grossilabris. (*G. C.* 1881, xvi. 717.) An unattractive plant of cæspitose habit, with cuneate-spathulate acute l. and racemes of small greenish fl. with a thick fleshy lip.

Stelis zonata. (*G. C.* 1884, xx. 556.) Allied to *S. muscifera*, but smaller, with a short stem and very thick cuneate oblong blunt l. Raceme one-sided; fl. light ochre. Sep. brown at the base; pet. with a mauve middle zone. Demerara.

Stellaria graminea aurea. (*R. H.* 1885, 441.) Caryophyllaceæ. H. A var. with leaves of a golden-yellow colour.

Stellera Alberti. (*Gfl.* t. 1262.) Thymelæaceæ. H. shr. 1–2 ft. high, much branched. L. oblanceolate, obtuse, cuneate at the base, subsessile, glabrous, or the young ones minutely silky-pilose. Fl. in pedunculate heads, small, yellow. Central Asia.

Stemodia durantifolia. (*Damm. Cat.* 1890–91, 80.) Scrophulariaceæ. G. or H. H. annual, branching from the base, with opposite sessile lanceolate toothed l. and terminal spikes of bluish-purple fl. Tropical America.

Stenandrium beeckmanianum. (*Ill. H.* 1892, t. 166.) Acanthaceæ. S. A garden hybrid between *S. pictum* and *S. Lindeni*.

Stenandrium goossensianum. (*Ill. H.* 1893, t. 168.) S. A garden hybrid. L. variegated, green and yellow, margined with brown.

Stenandrium igneum. (*Ill. H.* 1877, t. 266.) S. [Syn. *Eranthemum igneum*, Linden.]

Stenandrium Lindeni. (*Ill. H.* 1891, t. 136.) S. A foliage plant of dwarf habit. with elliptic obtuse l. dark green, shading into paler green towards the centre, and marked with yellow veins. Fl. yellow, in erect cylindric spikes. Peru.

Stenanthium occidentale. (*Gfl.* t. 1035, f. 3; t. 1132, f. 1.) Liliaceæ. H. bulb, with 2–4 linear l. and a slender bracteate stem with a lax raceme of bracteate bell-shaped dark purple fl. somewhat resembling those of a hyacinth. North-west America.

Stenia guttata. (*G. C.* 1880, xiv. 134.) Orchidaceæ. S. epiphyte in the way of *S. pallida*, but differing in having blunter sep. and pet. with spots of purple on a straw-coloured ground, and in the lip being blotched and having only seven callous teeth. Peru.

Stenoglottis longifolia. (*B. M.* t. 7186.) Orchidaceæ. S. A pretty terrestrial orchid with the habit of *Habenaria*. L. 6 in. long; scape erect, 18 in. high, upper half clothed with deep mauve fl. Labellum fimbriated. Natal.

Stenomesson luteoviride. (*B. M.* t. 6508.) Amaryllidaceæ. G. bulb with linear lorate l. 1 ft. long, contemporary with the fl. Scape 1½ ft. high, bearing a 5–6-flowered umbel of greenish yellow fl. 3 in. long, the segments keeled with green. Corona ½ in. long, green. Andes of Ecuador.

Stenomesson Stricklandi. (*G. C.* 1882, xviii. 102.) G. Bulb bearing petioled oblong-lanceolate l. and a 5–6-flowered umbel of bright red fl. Perianth-segments longer than the tube. Ecuador.

Stenospermation multiovulatum. (*G. C.* 1894, xv. 683.) Araceæ. S. Stems 3–6 ft. high; leaf-blade oblong, 12 in. by 5 in., with a petiole 6 in. long. Peduncle 12–18 in. long; spathe 6 in. long, white. [Syn. *S. spruceanum*, Schott, var. *multiovulatum*, Engl.] Colombia.

Stenotaphrum glabrum variegatum. (*R. H.* 1875, 140.) Gramineæ. G. or S. trailing grass with the l. beautifully striped with yellow.

Stephanandra incisa. (*Gfl.* 1888, 537.) Rosaceæ. [*S. flexuosa*, Sieb. & Zucc.]

Stephanandra Tanakæ. (*Gfl.* t. 1431: *B. M.* t. 7593.) H. deciduous shr. larger in all its parts than *S. flexuosa*. Japan.

Stephanophysum longifolium. (*B. H.* 1880, 20, t. 4: *F. M.* t. 419.) G. shr. 2–3 ft. high, with opposite oblong lanceolate l. and lax cymes of bright scarlet fl.; corolla campanulate, suddenly contracted into a narrow tube at the base; lobes 5, sub-equal and slightly spreading. [*Ruellia.*] Brazil.

Sterculia austro-caledonica. (*B. M.* t. 7382.) Sterculiaceæ. S. An erect unbranched tree 10 ft. or more high, with a terminal crown of large palmately lobed l. and lateral racemes springing from the old part of the trunk; fl. numerous, ½ in. diam., deep red, shaded with orange. [Syn. *S. novocaledonica*, Hort.] New Caledonia.

Sterculia discolor. (*B. M.* t. 6608.) G. shr. growing to a tall tree. L. long-stalked, palmately 5-lobed. Fl. in terminal spicate panicles. Calyx 1½ in. long, campanulate, rose-red. Pet. none. Eastern Australia.

Sternbergia fischeriana. (*G. and F.* 1895, 144; *G. C.* 1895, xvii. 390; *B. M.* t. 7459.) Amaryllidaceæ. H. Differs from *S. lutea* in its habit of flowering in March, instead of in the autumn. The fl. also are not of so dark a shade of yellow. Asia Minor.

Stevia odorata. (*Damm. Cat.* 1890–91, 80, 83, f. 53.) Compositæ. G. per. A free-flowering species about 16 in. high with narrow lanceolate acuminate l. and odorous white fl. in terminal corymbose cymes.

Stigmaphyllon littorale. (*B. M.* t. 6623.) Malpighiaceæ. G. or S. A showy climber with large elliptic-cordate acute l. and long-peduncled umbels of bright yellow fl. Pet. unequal, two larger than the rest, orbicular, clawed, denticulate. South Brazil.

Strelitzia Nicolai. (*R. H.* 1879, 220; *B. M.* t. 7038.) Scitamineæ. S. per. In habit and foliage closely resembling *S. augusta*, but differing in its larger bracts and fl., and in the hastate combined pet., which are of a pale blue colour. South Africa.

Strelitzia Nivenii. (*R. H.* 1888, 117.) S. Garden hybrid.

Strelitzia pumila. (*R. H.* 1879, 220.) S. per. A dwarf compact var. of *S. Reginæ*.

Strelitzia Reginæ citrina. (*G. C.* 1887, ii. 816.) S. A var. with citron-yellow sep. South Africa.

—— Var. **Lemoinierii.** (*Fl. des S.* t. 2370–1.) S. A var. with yellow fl.

Streptocalyx Vallerandi. (*R. H.* 1883, 13, t. 1–2.) Bromeliaceæ. S. [Syn. *Lamprococcus Vallerandi*, Carr.]

Streptocarpus bifloro-polyanthus. (*Fl. des S.* t. 2429.) Gesneraceæ. G. Garden hybrid.

Streptocarpus Bruanti. (*R. H.* 1889, 267, 292.) S. A hybrid between *S. Rexii* and *R. polyanthus*.

Streptocarpus caulescens. (*B. M.* t. 6814.) S. An interesting caulescent species with a curious swollen hairy stem giving off leafy branches with pairs of elliptic obtuse shortly stalked l. and pedunculate cymes of pale lilac fl. ½ in. in diam. East Tropical Africa.

Streptocarpus Dunnii. (*B. M.* t. 6903; *G. C.* 1886, xxvi. 625; 1887, i. 804; *R. H.* 1886, 557; 1887, 166.) G. or S. A floriferous species with a single very large l. growing to 2 or 3 ft. long, and numerous many-flowered cymes of tubular red fl. Transvaal.

Streptocarpus Dyeri. (*G. and F.* 1895, 5.) S. A garden hybrid between *S. Dunnii* and *S. Wendlandi*.

Streptocarpus Galpini. (*G. C.* 1891, x. 546; *G. and F.* 1891, 534; *B. M.* t. 7230.) S. A species of the monophyllous section. Fl. nearly 1½ in. across, campanulate and coloured rich mauve with a conspicuous white eye. Transvaal.

Streptocarpus Greenii. (*G. C.* 1882. xvii. 302–3, f. 43.) S. A garden hybrid between *S. Saundersii* and *S. Rexii*.

Streptocarpus kewensis. (*G. C.* 1887, ii. 137, 246, f. 61; *R. H.* 1887, 391.) S. Garden hybrid.

Streptocarpus Kirkii. (*B. M.* t. 6782.) S. A pretty species with a distinct erect pubescent stem, petiolate cordate-elliptic obtuse pubescent l. and axillary pedunculate lax cymes of lilac fl. ½ in. in length. East Tropical Africa.

Streptocarpus lichtensteinensis. (*G. C.* 1894, xvi. 510.) S. A garden hybrid between *S. Wendlandi* and *S. Watsoni*.

Streptocarpus multiflorus. (*G. C.* 1895, xviii. 211.) S. A garden seedling of *S. Rexii* with larger brighter-coloured fl. than the type.

Streptocarpus parviflorus. (*B. M.* t. 6636.) S. per. A pretty species with several lanceolate obtuse rugose l. and

3-6-flowered cymes of whitish fl. Corolla ¾ in. long, tubular, with a 5-lobed spreading limb; the three lower lobes veined with yellow. [*S. luteus*, C. B. Clarke.] South Africa.

Streptocarpus parviflorus. (*G. C.* 1888, iii. 800; *B. M.* t. 7036.) S. Herb. per. with a rosette of elongate-oblong or lanceolate-oblong obtuse softly hairy l. and pedunculate few-flowered cymes of tubular fl. about ¾ in. long and about the same across the spreading limb of the corolla, which is white with a little yellow on the lower side of the throat; tube pale violet inside and out. South Africa.

Streptocarpus Watsoni. (*G. C.* 1887, ii. 137, 215, f. 52.) S. Garden hybrid.

Streptocarpus Wendlandii. (*Damm. Cat.* 1890-91, 80; *B. M.* t. 7447.) S. or G. per. A fine species with l. 2–3 ft. long by 8–12 in. broad. Fl. in a tall panicle, somewhat like those of *S. Dunnii* in size and form, but of a clear blue colour. Natal.

Streptosolen Jamesoni. (*R. H.* 1883, 36, t.; *G. C.* 1883, xix. 116.) Solanaceæ. G. This was introduced about 50 years before, but appears to have soon disappeared until it was re-introduced in 1882. [Syn. *Browallia Jamesoni*, Benth.; *B. M.* t. 4605.] Colombia.

Strobilanthes attenuatus. (*Gfl.* t. 1243.) Acanthaceæ. S. A handsome shr. with petiolate ovate acuminate serrate dark green l. and loose panicles of violet-blue fl. marked with a yellow spot in the throat. [*S. alatus*, Nees.] Himalaya.

Strobilanthes coloratus. (*B. M.* t. 6922.) S. Glabrous shr. L. 5–7 in. long, ovate, acuminate, toothed, dark green above, purple beneath. Fl. in lax panicles, pale lilac-purple, ¾ in. in diam. with a swollen nearly straight tube. Eastern Himalaya.

Strobilanthes dyerianus. (*G. C.* 1893, xiii. 442; *G. and F.* 1893, 194; *J. of H.* xxvi. 359, f. 66; *B. M.* t. 7574.) S. A free-growing plant with opposite ovate acuminate l. coloured, especially when young, with rich rosy-purple markings on a dark green ground. Fl. on erect spikes, funnel-shaped, 1 in. long, violet-blue. East Indies.

Strobilanthes flaccidifolius. (*B. M.* t. 6947; *G. C.* 1887, ii. 109.) S. A pretty shr. yielding a blue dye. L. 2–4 in. long, elliptic-lanceolate, acute, serrate, glabrous, bright green, narrowed into a petiole. Fl. lilac-purple in loose leafy paniculate spikes; the tube of the corolla is bent and the lobes deeply notched. India; China.

Stromanthe lubbersiana. (*B. H.* 1882, 21, t. 1.) Scitamineæ. S. foliage plant, 12–18 in. high, with oblong cuspidate l. prettily variegated with light greenish streaks on a dark green ground in the direction of the lateral veins. [*Myrosma Lubbersii*, Hort.] Brazil.

Strophanthus Ledienii. (*Gfl.* t. 1241; *G. C.* 1887, i. 447.) Apocynaceæ. S. shr. with deciduous opposite obovate cuspidate subsessile rubescent l. and terminal umbels of yellow fl. with a purple throat, appearing when the plant is bare of l. Pedicels ¾ in. long and, as well as the calyx, green. Corolla funnel-shaped, the spreading lobes with linear tails 4½–5 in. long. Congo.

Strophanthus petersianus grandiflorus. (*B. M.* t. 7390.) S. A climbing evergreen shr. with ovate undulate l. 3–5 in. long and terminal clusters of erect bell-shaped red and yellow fl.; corolla-lobes drooping and lengthened into twisted tails 8 in. long. Delagoa Bay.

Stropholirion californicum. (*G. and F.* 1888, 291.) Liliaceæ. H. H. [Syn. *Brodiæa volubilis*, Baker.]

Stuartia Pseudo-camellia. (*G. C.* 1888, iv. 188, f. 22; *G. and F.* 1888, 315.) H. [Syn. *S. grandiflora*, Briot.] Japan.

Styrax californicum. (*Bull Cat.* 1885, 15.) Styraceæ. H. H. deciduous shr. producing early in the spring a profusion of large and beautiful white fl. which are deliciously fragrant. California.

Styrax Obassia. (*G. C.* 1888, iv. 133, f. 14; *B. T. O.* 1888, 347; *B. M.* t. 7039.) H. L. elliptic or roundish, cuspidate, 3–8 in. long and as much broad, petiolate, denticulate. Racemes 6–8 in. long, bearing numerous fragrant white fl., 1–1¼ in. in diam. Japan.

Susarium Segethi. (*Gfl.* t. 1117, f. 1.) Iridaceæ. H. per. A very curious and interesting plant with creeping stem, rush-like l. 3–4 in. long and solitary blue fl. having the slender tube and the bases of the six segments orange; spathe-valves two. [*Symphyostemon.*] Chile.

Susum anthelminthicum. (*R. H.* 1889, 76, f. 23.) Flagellariaceæ. S. An interesting *Dracæna*-like plant with stalked lanceolate acuminate l. and a stout fl.-stem bearing half-whorls of fl.-spikes 2–3 in. long, of reddish-tinted unisexual fl. Sumatra.

Swainsona atrococcinea. (*R. H.* 1887, 275.) Leguminosæ. G. Garden variety.

Swainsona coronillæfolia alba. (*W. G.* 1889, 487.) G. A form with white fl. Australia.

Swainsona Ferrandi alba. (*R. H.* 1886, 562.) G. Garden variety.

Symphoricarpos acutus. (*H. G.* 1888, 562.) Caprifoliaceæ. H. shr. with oblong-lanceolate acute or acuminate softly tomentose l., which are acute at the base, and sometimes toothed. North-west America.

Symphoricarpos occidentalis Heyeri. (*H. G.* 1888, 562.) H. A form with rhomboid l. of firm texture, with prominent veins, and pretty rosy fl. Colorado.

Symphyandra Hoffmanni. (*W. G.* 1884, 352, f. 53; *G. C.* 1888, iv. 760, f. 107: *B. M.* t. 7298.) Campanulaceæ. H. per. allied to *S. pendula*, but more robust and more floriferous. 1–2 ft. high, softly hairy. L. lanceolate, acute, serrate. Fl. white, drooping, 1–1½ in. long; the calyx-lobes ovate-lanceolate, acute, entire. Bosnia.

Symphytum peregrinum. (*B. M.* t. 6466.) Boraginaceæ. H. This is the plant now well known under the name of *S. asperrimum*, or prickly Comfrey, cultivated extensively as a forage plant. It has large stalked cordate-ovate acute radical l., lanceolate acute stem-l. and scorpioid cymes of pink and blue fl. The whole plant, is very hispid. Caucasus.

Symplocos Sumuntia. (*Gfl.* t. 1073, f. c–g.) Styracaceæ. G. shr. with narrowly elliptic acute serrulate l. cuneate at the base, and short few-flowered spikes of small whitish fl. Himalaya.

Synandrospadix vermitoxicus. (*B. M.* t. 7242.) Araceæ. S. Rootstock tuberous with annual l., which are large, hastate, green and very succulent; scape 1 ft. high, bearing an ovate open spathe 6 in. long and 4 in. wide, grey-green outside, flesh-coloured inside; spadix as long as the spathe, covered with fl. Tucuman, Argentina.

Synantherias sylvatica. (*B. M.* t. 7190.) Araceæ. S. This is the accepted name for the plant cultivated as *Amorphophallus zeylanicus*, *Arum sylvaticum*, &c.

Synechanthus fibrosus. (*B. M.* t. 6572.) Palmæ. S. A graceful Palm, with smooth annulated stem, bulbous at the base. L. pinnate, 4 ft. long; leaflets 1–1½ ft. long, linear-lanceolate, acuminate. Spadix much branched; branches slender. Fr. an orange-red ellipsoid drupe, ¾ in. long. Guatemala.

Syneilesis aconitifolia. (*Gfl.* t. 887.) Compositæ. H. per. of little beauty, with tall striated stem and long-stalked palmatipartite l.; lobes several, with a few strong teeth. Corymbs lax; heads small, about 5-flowered, discoid, pink. [*Senecio aconitifolius*, Turcz.] Amur; North China.

Synthyris pinnatifida. (*W. G.* 1889, 222.) Scrophulariaceæ. H. per. 6–8 in. high, with leathery bipinnatifid deep green l. and spikes of handsome dark blue fl. Rocky Mountains.

Synthyris reniformis. (*B. M.* t. 6860.) H. per. L. all radical, with long petioles, roundish, deeply cordate at the base, bidentate on the margins. Peduncles 5–10 in. long, with a few spathulate reduced l. and a long raceme of small pretty blue fl.; corolla 4-lobed, with the upper lobe bifid. Stamens 2. Capsule flattened, roundish, with a notch at the apex. California.

Syringa amurensis. (*G. and F.* 1888, 222, 453; 1889, 271, f. 112.) Oleaceæ. H. shr. 6–8 ft. high. L. ovate or oblong, obtuse or acuminate, contracted into a long channelled petiole. Fl. white, in a dense panicle; corolla-tube included in the short calyx. Manshuria.

Syringa Bretschneideri. (*W. G.* 1890, 369.) H. [*S. Emodi*, Wall. var. *rosea*, Cornu.]

Syringa Emodi aurea. (*R. H.* 1886, 547.) H. Garden variety.

—— Var. **foliis variegatis.** (*R. H.* 1886, 547.) H. Garden variety.

—— Var. **rosea.** (*R. H.* 1888, 492, t.) H. A var. with rosy lilac fl. China.

Syringa japonica. (*G. C.* 1886, xxv. 560-1, f. 123; *G. and F.* 1889, 295, f. 115.) H. Shr. or small tree with deciduous coriaceous elliptic acute strongly net-veined l. and large panicles of small white fl. Japan.

Syringa Lemoinei. (*R. H.* 1885, 310.) H. Fl. double, pale ashy lilac. Garden var.

Syringa pekinensis. (*G. and F.* 1888, 222, 453; 1890, 165, f. 30.) H. A small tree with long graceful flexuous branches. L. ovate, deltoid, obtuse or acuminate, on long slender petioles. dark green, paler beneath. Panicle dense. Fl. white, with the corolla-tube scarcely longer than the obscurely denticulate calyx. China.

Syringa ranunculifolia. (*R. H.* 1885, 310.) H. Fl. double, dark red, becoming lilac. Garden var.

Syringa rubella. (*R. H.* 1885, 310.) H. Fl. double, vinous red, changing to rose-violet. Garden var.

Syringa persica mimosæfolia. (*R. H.* 1878, 453, f. 95.) H. shr. A var. with imparipinnate l.

Syringa pubescens. (*G. and F.* 1888, 414, f. 67.) H. A free-flowering shr. of compact habit, 3–5 ft. high, with ascending slender branches; l. rather small, elliptic-ovate. acute, 1½–2 in. long, pale beneath, with a pubescent midrib; fl. in panicles, long-tubed, pale rose, very fragrant. [*S. villosa*, Vahl; *B. M.* t. 7064.] North China.

Syringa villosa. (*G. and F.* 1888, 222, 520, f. 83.) H. shr. very similar to *S. Emodi* and *S. Josikæa*, but differing in having the underside of the l. clothed with long white hairs. Possibly the same as *S. Emodi rosea*. China.

Syringa vulgaris chamæthyrsa. (*R. H.* 1894, 370, f. 137–8.) H. A dwarf monstrous form of the common Lilac.

—— Var. **Lemoinei.** (*B. H.* 1878, 174, t. 8.) H. A fine var. of the common Lilac, with double fl.

Tabernæmontana amygdalæfolia. (*R. H.* 1879, 391.) Apocynaceæ. S. shr. L. opposite, elliptic-lanceolate, thick. Fl. white, in short bunches. Corolla with a long narrow tube and five spreading lobes. South America.

Taccarum warmingianum. (*G. C.* 1881, xvi. 654, 661, f. 134.) Araceæ. S. Tuberous-rooted Aroid, with the habit of an *Amorphophallus*. L. solitary. Petiole 3 ft. high, stout, light green, marked with numerous white lines; lamina with a spread of 2–2½ ft., having 3 principal bipinnatifid divisions, bright green. Scape 8 in. long. Spathe 15 in. long, convolute below, open above, light coppery brown. Spadix shorter than the spathe. Ovaries green, surrounded by 4–6 fleshy dirty brown staminodes. Stamens of male fl. nnited into a thick fleshy round-topped pinkish column. Brazil.

Tachiadenus radiatus. (*W. G.* 1889, 113.) Gentianaceæ. This seems to be an error for *T. carinatus*.

Tacsonia Parritæ. (*Williams' Cat.* 1882, 28; *G. C.* 1882, xvii. 218, 225, f. 34; *Fl. and P.* 1882, 38.) Passifloraceæ. G. climber with 3-lobed l. and large orange fl. Fl.-tube long, inflated and sulcate at the base. Sep. oblong, hooded, provided with a remarkably deep acutely pointed wing. Colombia.

Tacsonia smythiana. (*G. C.* 1892, xii. 442, 704, f. 109.) G. A garden hybrid or seedling very similar to *T. mollissima*, but with brighter coloured fl.

Tagetes gigantea. (*R. H.* 1886, 107.) Compositæ. H. H. A stout herb 6–9 ft. high, with a stout pruinose stem and opposite pinnate l. with soft narrowly elliptic toothed leaflets having a balsamic odour. Bolivia.

Talauma Candollei galeottiana. (*B. M.* t. 6614.) Magnoliaceæ. G. shr. differing in no appreciable characters from the type. L. lanceolate; fl. large, pale yellow, and very fragrant. Java.

Talauma Hodgsoni. (*B. M.* t. 7392.) G. An erect evergreen tree with shining green l. from 8–20 in. long and about 6 in. wide. Fl. solitary, terminal, fragrant, cupped, 6 in. in diam.; outer segments purple, inner white. Himalaya.

Talinum Arnottii. (*B. M.* t. 6220.) Portulacaceæ. G. or S. per. succulent. Rootstock cylindric, erect, woody, 5–8 in. long, brown. Stems succulent, cylindric, sparingly branched, green. L. alternate, broadly oblong, obtuse, apiculate, fleshy, green; margins entire. Fl. yellow, 1 in. in diam., on slender axillary 1-flowered peduncles having one bract above the middle. South Africa.

Talinum roseum. (*Damm. Cat.* 1892, 4.) G. A dwarf succulent shr. with long panicles of rose-coloured fl. [*T. cuneifolium*, Willd.?] Abyssinia.

Talisia princeps. (*G. C.* 1888, iii. 806.) Sapindaceæ. S. tree. It has an unbranched stem, with a crown of spreading pinnate l. about 6 ft. long, and large branching panicles of small whitish fl. This is the ornamental tree known in gardens as *Theophrasta pinnata*, *Browneu princeps*, and *B. erecta*. Venezuela.

Tamarix hispida. (*R. H.* 1894, 352, t.) Tamaricaceæ. [Syn. *T. kashgarica*, Hort.]

Tamarix kashgarica. (*G. C.* 1893, xiii. 414.) H. It differs in appearance from the rest of the genus in the l. being very small, glaucous green, adpressed and imbricated. [*T. hispida*, Willd.]

Tamarix odessana. (*Nat. Arb. Zösch.* 1891, 27; *G. C.* 1891, ix. 462.) Odessa.

Tanacetum fruticulosum bracteatum. (*G. C.* 1878, viii. 584.) Compositæ. H. herb differing from the type in its more loosely corymbose infl. and longer one-headed bracteate peduncles, several of the bracts crowded beneath the head giving the appearance of a double involucre. India.

Tapeinanthus humilis. (*G. C.* 1887, i. 53, f. 13.) Amaryllidaceæ. H. A small bulb having a filiform l. and solitary yellow fl., ¾ in. in diam., on a very slender scape 2–3 in. high. The perianth is cut to the base into narrow obovate segments with a small scale at their base. Spain; Tangiers.

Tapeinotes Carolinæ major. (*Ill. H.* 1883, t. 506; *Fl. and P.* 1884, 10.) Gesneraceæ. S. Stems erect, robust, purple; l. large, oblanceolate, acute, of a dark velvety green, with the midrib, margins and under surface purple-red; fl. clustered, axillary, large, on red pedicels, with a large leafy green calyx, and a much inflated curved hairy white corolla. This var. is much larger in all its parts than the typical form. [*Sinningia Carolinæ*, Benth. & Hook. f.] Bahia.

Taxus baccata, varieties **adpressa, cheshuntensis, Dovastoni erecta, fructu-luteo hibernica, variegata argentea,** and **variegata aurea.** Taxaceæ. H. (*R. H.* 1886, 103–6, f. 18–22.)

Taxus floridana. (*G. and F.* 1896, 261.) H. A bushy tree, rarely 30 ft. high, with a short trunk occasionally 1 ft. in diam., and many stout spreading branches. Florida.

Tchihatchewia isatidea. (*Gard.* 1892, xli. 484; 1893, xliv. 145; *B. M.* t. 7608.) Cruciferæ. H. A handsome per. rock-plant forming rosettes like *Saxifraga longifolia*, and racemes of bright rosy-pink fragrant fl. Armenia.

Tecoma amboinensis. (*Bull Cat.* 1886, 9.) Bignoniaceæ. S. climber, with pinnate l. and axillary racemes of orange-red fl. 3–4 in. long. Amboyna, Malaya.

Tecoma ricasoliana. (*B. T. O.* 1887, 17, t. 1–2.) G. climber. L. pinnate; leaflets ovate, acute, toothed. Fl. in terminal panicles; corolla with a somewhat inflated or narrowly funnel-shaped tube and spreading limb, delicate rose-pink, veined with a darker shade. [Syn. *T. Mackenii*, W. Watson; *G. C.* 1887, i. 215.] South Africa.

Tecoma Smithii. (*Bull Cat.* 1889, 8.) G. A garden hybrid between *T. velutina* and *T. capensis*.

Tecophilæa cyanocrocus Leichtlinii. (*Gfl.* 1886, 87.) Hæmodoraceæ. H. H Fl. deep blue, without any trace of yellow. The blue is like that of *Gentiana verna*. Chile.

Telfairia occidentalis. (*B. M.* t. 6272.) Cucurbitaceæ. S. climber. Glabrous except petioles, racemes and young parts. Root per., stout and fleshy; stem slender, grooved. L.

stalked, pedately 5-foliate; leaflets 3–6 in. long, elliptic-ovate, acuminate, sinuately toothed, 3-nerved, bright green. Male fl. in a long raceme, all 1½ in. in diam., white, with a purple eye, the broad ovate-deltoid lobes beautifully fimbriate. Fr. about 2 ft. long, ovoid-oblong, obtusely beaked, with 10 broad wings, 3-celled, bluish or yellowish green; pulp orange. Seeds roundish, flattened, brown, 1 in. or more in diam. West Tropical Africa.

Telipogon Crœsus. (*G. C.* 1877, vii. 172.) Orchidaceæ. S. Stems narrow and thin, with distichous l. Fl. 1½ in. in. diam., yellow, with a dark network. Sep. triangular, acuminate, aristate, 3-nerved, carinate outside on the middle nerve. Pet. cuneate, rhomboid, obtuse-angled, 5-nerved: lip very broad, flabellate, rounded, many-nerved; base velvety; column hollow. Colombia.

Tenaris rostrata. (*G. C.* 1885, xxiv. 39.) Asclepiadaceæ. S. per. with a depressed-globose tuber 1¾ in. in diam., a slender stem 1½ ft. high, with a few distant pairs of linear acute l. 2–3 in. long, ½ in. broad, and 1-flowered peduncles arranged along the terminal part of the stem in a racemose manner. Fl. ¾ in. in diam., rotate, whitish, densely covered towards the base of the lobes with minute purple dots, giving the fl. a pinkish hue. East Tropical Africa.

Tetramicra minuta. (*G. C.* 1889, v. 527.) Orchidaceæ. G. The whole plant barely 2 in. high.

Thalictrum Delavayi. (*B. M.* t. 7152; *G. C.* 1890, viii. 124, f. 19.) Ranunculaceæ. H. herb. per. with stems 2–3 ft. high. Radical l. long-petioled, ternately decompound, 10–12 in. broad; leaflets obtusely 3–5-lobed, cordate at the base; fl. pale purple, in lax panicles. Sep. ½ in. long, obtuse, elliptic-ovate. Allied to *T. Chelidonii*. Yunnan, China.

Thalictrum rhynchocarpum. (*G. C.* 1892, xi. 722.) H. H. per. Fl.-stems 3 ft. high, paniculate. L. like those of the Maiden-hair fern. Fr. on long hair-like stalks. Transvaal.

Thermopsis napaulensis aurea. (*R. H.* 1879, 100.) Leguminosæ. H. H. shr. only differing from the type in having the bark striped with yellow and green. [*Piptanthus nepalensis*, Sweet, var.]

Thomasia glutinosa latifolia. (*Gfl.* t. 1186.) Sterculiaceæ. G. shr. with stalked cordate acute l. covered with stellate hairs, and racemes of pretty pink fl. with the stamens and a blotch at the base of the pet. dark-brown. Australia.

Thomsonia nepalensis. (*B. M.* t. 7342.) Araceæ. S. An *Amorphophallus*-like plant having a large tuberous rootstock, an annual leaf 2 ft. high with a trisect pinnatifid blade 2 ft. across and an erect scape 4 ft. high, bearing a greenish yellow boat-shaped spathe nearly a foot long, and an erect yellow spadix nearly as long as the spathe. Himalaya.

Thrinax graminifolia. (*Ill. H.* 1884, t. 542.) Palmæ. S. L. peltate, divided into 15–18 linear acuminate segments; petioles slender. [*T. multiflora*, Mart.]

Thrinax Morrisii. (*G. C.* 1891, ix. 700, f. 134; 1892, xi. 113 f.) Palmæ. S. A small species, not exceeding 3 ft. in height. Anguilla Island, West Indies.

Thrixspermum Berkeleyi. (*G. C.* 1882, xvii. 557.) Orchidaceæ. S. A species with a short stem, cuneate-ligulate unequally toothed l. about 9 in. long, and a rich 3-ranked raceme of cream-coloured fl. spotted with amethyst on the lip. [*Sarcochilus Berkeleyi*, Reichb. f.] Andaman Islands.

Thrixspermum Freemanii. (*G. C.* 1877, vii. 750.) S. L. ligulate, slightly undulate, bidentate, 6–7 in. long, 1¼ in. wide. Raceme many-flowered; bracts semi-ovate, larger than the small ovary. Sep. very long, narrow-leaved; pet. a little shorter. Fl. yellow spotted with brown. Lip small, saccate, tridentate, with four stalked globular bodies covered with small warts before the base; the centre white; the lateral parts yellow, with brown streaks. [*Sarcochilus Freemanii*, Reichb. f.] Assam.

Thrixspermum Hartmanni. (*G. C.* 1877, vii. 716.) S. L. about 4, rather thick, ligulate, bidentate. Fl. in a dense raceme, rather small, white, with numerous brick-red spots around the bases of sep. and pet. on both sides. Side lobes of lip semi-falcate or oblong, richly painted with brick-red spots and streaks. Callus in the middle of the lip yellow, with red spots; spurs

solid, having in front two yellow eyes with red margins; middle lobe of lip yellow. [*Sarcochilus Hartmanni*, F. Muell.; *B. M.* t. 7010.] Queensland.

Thrixspermum indusiatum. (*G. C.* 1886, xxv. 585; *Cat. Comp. Cont. d'Hort.* 1886, 5.) S. A small-flowered species with soft shining oblong l. 3 in. broad, and short dense racemes of yellowish fl. spotted with red; lip white; spur cylindric, with a kind of bucket at its apex. Sunda Isles.

Thrixspermum Moorei. (*G. C.* 1880, xiii. 104.) S. L. nearly 1 ft. long, and exceeding 2 in. in width. Peduncle half the length of the leaf, dark-coloured, bearing a many-flowered raceme. Sep. and pet. light yellow, with numerous brown blotches. Lip sacciform, with short lobes. [*Sarcochilus Moorei*, Hort.] Solomon Islands.

Thrixspermum muriculatum. (*G. C.* 1881, xvi. 198.) S. L. ligulate, unequally bilobed, 8–9 in. long. Peduncle blackish brown, muricate. Fl. with pale ochre sep. barred with purple, and a conical white lip spotted with brown and purple. [*Sarcochilus muriculatus*, Reichb. f.] India.

Thrixspermum sillemianum. (*G. C.* 1882, xvii. 524.) S. Habit of *Vanda teres*, but not quite so robust. L. terete. Peduncle two-flowered. Fl. milk-white, slightly tinted with light yellow; lip striped with purple: middle lobe yellow inside and marked with two purple spots outside. [*Sarcochilus sillemianus*, Reichb. f.] Burma (?).

Thrixspermum unguiculatum. (*W. O. A.* t. 266.) S. Known as *Phalænopsis Ruckeri* in gardens. [*Sarcochilus unguiculatus*, Lindl.]

Thujopsis borealis nidifera. (*G. C.* 1890, vii. 108.) Coniferæ. H. A seedling var. with plume-like branchlets. [*Cupressus nootkatensis*, Lamb. var.]

Thunbergia affinis. (*G. C.* 1887, ii. 460–1, f. 94; *B. M.* t. 6975.) Acanthaceæ. S. A handsome shr. with shortly stalked ovate or ovate-lanceolate bright green l. and solitary fl. 2 in. in diam., of a dark purple-blue, with a yellow throat. Zanzibar.

Thunbergia grandiflora alba. (*G. C.* 1892, xii. 501.) S. Fl. pure white.

Thunbergia Kirkii. (*B. M.* t. 6677.) S. shr. with opposite lanceolate three-nerved l., having one strong tooth at the middle of each side, and axillary purple fl. with a funnel-shaped tube and equally 5-lobed spreading limb. East Tropical Africa.

Thunia alba gigantea. (*Sand. Cat.* 1896, 17.) Orchidaceæ. S. Fl. larger than in the type, pure white; lip golden yellow. [*Phaius albus*, Lindl. var.]

Thunia brymeriana. (*K. B.* 1894, 156; *R.* ser. 2, t. 82.) S. Allied to *T. marshalliana*; stems 2 ft. high; l. 9 in. long; fl. in terminal drooping heads, large, white; lip yellow, with radiating crimson lines. [*Phaius.*] Burma.

Thunia candidissima. (*G. C.* 1888, iv. 34; *H. G.* 1888, 397.) S. [*Phaius candidissimus*, N. E. Br.]

Thunia marshalliana ionophlebia. (*G. C.* 1885, xxiv. 70.) S. Lip with sulphur-coloured disc and crest and with erose veins to the apex. [*Phaius albus*, Lindl. var.]

—— Var. **purpurata.** (*G. C.* 1888, iv. 62.) S.

—— Var. **triloba.** (*G. C.* 1888, iv. 62; *H. G.* 1888, 397.) S.

Thunia mastersiana. (*G. C.* 1891, x. 420; *Gfl.* 1891, 610.) S. Stems 4 ft. high and l. 1 ft. long. Fl. about half the size of those of *T. alba*. [*T. pulchra*, Reichb. f.] Moulmein, Burma.

Thunia nivalis. (*G. C.* 1888, iv. 62, under *T. marshalliana triloba*.) No description. [*Phaius.*]

Thunia veitchiana. (*G. C.* 1885, xxiii. 818.) A garden hybrid between *T. marshalliana* and *T. Bensonæ*. [*Phaius.*]

—— Var. **superba.** (*G. C.* 1894, xvi. 49.) A garden hybrid between *T. veitchiana* and *T. Bensonæ*. [*Phaius.*]

Thunia winniana. (*G. C.* 1895, xvii. 198; *L.* x. t. 452.) Fl. large with rosy lilac segments and a very deep maroon-coloured plicated lip. [*Phaius.*]

Thuya occidentalis elwangeriana aurea. (*M. D. G.* 1896. 28.) Coniferæ. H. A form of the American *Arbor Vitæ* with golden yellow l. which do not "burn" during summer.

—— Var. **Spæthii.** (*Gfl.* 1890, 226, f. 54.) H. A var. with shoots thread-shaped when young, becoming regularly feathered in their second year.

—— Var. **Wagneri.** (*M. D. G.* 1896, 28.) H. A form of thick compact narrow pyramidal habit.

Thymus rotundifolius. (*G. C.* 1879, xii. 106.) Labiatæ. H. Like the common thyme, but with rounder l., more floriferous and more dwarf. Pyrenees.

Thymus Serpyllum atropurpureus. (*G. C.* 1888, iii. 650.) H. alpine var. of a dark purple colour. North of England.

—— Var. **coccineus.** (*G. C.* 1888, iii. 715.) H.

Thyrsacanthus coccineus. (*Gfl.* 1888. 128.) Acanthaceæ. S. [*T. lemairianus.* Nees.]

Thyrsacanthus lemairianus. (*Gfl.* 1888, 128.) S. This is the corrected name for the plant known in gardens as *Eranthemum coccineum* and *Thyrsacanthus coccineus.*

Tibouchina meiodon. (*K. B.* 1895. 104.) Melastomaceæ. S. A loose shr. 6 ft. high. L. ovate, 1 in. long. Fl. in peduncled cymes; corolla ½ in. wide, purple. Brazil.

Tigridia buccifera. (*G. and F.* 1889. 412, f. 125.) Iridaceæ. H. H. Stems 1 ft. high, glaucous, branching; radical l. 1 ft. long, plicate; cauline bracts foliaceous; spathes of two unequal bracts 1–2 in. long; fl. 2 in. broad, greenish yellow, dotted with purple at the base; blade of the outer segments purple: inner segments tubular, folded in the centre: the dilated sides approximated in two cheek-like prominences below the small concave rounded purple blade. Anthers nearly sessile; styles hardly longer. Jalisco Mountains, Mexico.

Tigridia grandiflora liliacea. (*G. and F.* 1893, 367.) H. H. Supposed to be a cross between *T. Pavonia* and *T. Pavonia alba.* It has reddish purple fl. with nearly white variegation.

Tigridia grandiflora rosea. (*G. and F.* 1893, 367.) H. H. Supposed to be a hybrid between *T. Pavonia* and *T. conchiflora.* It has yellow fl. tinged with rose.

Tigridia lutea. (*B. M.* t. 6295.) H. H. Resembling *T. Pavonia* in habit and growth, but smaller in all its parts. The stem is about 1 ft. high, terminated by a head of 3–4 fl., which open in succession on different days and are very fugitive. Perianth-segments pale yellow, dotted with black at the base; the 3 inner ones smaller, with a glittering crystalline band just below the middle. Anthers yellow. Styles deeply forked and recurved. Chile.

Tigridia Pavonia alba. (*G. C.* 1883, xx. 339; *R. H.* 1882, 427; *Fl. and P.* 1882, 172.) H. H. Fl. white: the base of the segments spotted with red-brown on a yellow ground.

—— Var. **alba immaculata.** (*Gard.* 1896, xlix. 361.) A snowy white form without spots.

—— Var. **flava.** (*Gard.* 1896, 1. 22.) A distinct var. with pale yellow fl.

Tigridia Pringlei. (*G. and F.* 1888, 388, f. 61; *B. M.* t. 7089.) H. H. Much like the familiar *T. Pavonia*, chiefly differing in the pet. being broadly cordate or reniform at the base, with a narrower small triangular-ovate acute blade. Sep. bright scarlet-red; base blotched with crimson, with a border of orange. Pet. with the base blotched with crimson, having a well defined brownish margin; blade orange, tinged with scarlet, not spotted. Chihuahua, Mexico.

Tigridia violacea. (*G. M.* 1894, 324: *B. M.* t. 7356.) H. H. L. linear; fl. violet-coloured with deeper markings. Mexico.

Tilia argentea orbicularis. (*R. H.* 1890, 397.) Tiliaceæ. H. A form with pendent branches and thick coriaceous orbicular or rhomboidal l. cordate at the base, silvery beneath.

Tilia dasystyla. (*R. H.* 1883, 567.) H. tree having glabrous buds and large l. obliquely truncate at the base or sometimes sub-cordate, slightly hairy below, and bearded in the axils of the nerves. Capsule obovate, with prominent nerves; lower part of the pyramidal style tomentose and persisting as a point. South Tauria.

Tilia europæa pyramidalis aurea. (*W. G.* 1888, 164.) Garden variety. [*T. platyphyllos*, Scop. var.]

Tilia miqueliana. (*G. and F.* 1893, 111, f. 19.) H. A species nearly related to the Eastern European *T. argentea*. Japan.

Tilia petiolaris. (*B. M.* t. 6737; *R. H.* 1884, 384.) Cultivated under the names *T. americana pendula*, *T. alba pendula*, *T. platyphylla pendula*, and *T. argentea pendula*. Crimea (*l*).

Tillandsia Alberti. (*R. H.* 1888, 577.) Bromeliaceæ. S. Garden hybrid.

Tillandsia Armadæ. (*G. C.* 1883, xix. 693.) S. An elegant species with pale violet l. South Colombia.

Tillandsia balbisiana. (*R. H.* 1879, 98, t. 6–7; *B. H.* 1879, t. 6-7.) S. A species with a rosette of 8–30 linear channelled coriaceous reflexed and variously curved l. growing to a length of 18 in., ½ in. broad, green, covered with greyish scales. Scape 3–12 in. high, furnished with reduced l. Spikes 2–4, in a compact panicle, or solitary, distichous, 3–9-flowered; bracts deep rose; fl. 1½ in. long, much exserted, narrow, tubular, violet. Stamens exserted, violet. West Indies.

Tillandsia brachycaulos. (*B. H.* 1878, 185, t. 11.) S. A dwarf species with linear canaliculate recurved l. 6–9 in. long, red on the upper, greyish green on the lower surface, slightly scurfy. Fl. purple, about 12 in a head sessile among the l. Mexico.

Tillandsia Caput-Medusæ. (*B. H.* 1880, 90.) S. L. tumid at the base, forming a kind of bulb, lanceolate, thick, channelled, divaricate, arched, undulate, unequal, shining, silky-grey. Scape shorter than the l. clothed with elongated l. Panicle compound, of about 4 narrow elliptic 6–7-flowered spikes. Mexico.

Tillandsia chrysostachys. (*B. M.* t. 6906; *R. H.* 1887, 166.) S. [Syn. *Vriesia chrysostachys*, E. Morr.]

Tillandsia crocata. (*Baker's Handbook of the Bromeliaceæ*, 163.) S. [Syn. *Phytarrhiza crocata*, E. Morr. which see.]

Tillandsia didisticha. (*B. H.* 1881, 164, under *Anoplophytum*.) S. A distinct plant with thick robust fleshy lanceolate acuminate channelled greyish l., an elongate arcuate scape, and a congested distichous panicle of elliptic spikes. Fl. white. [*T. lorentziana*, Griseb.] Argentina.

Tillandsia distachya. (*G. C.* 1880, xiii. 200.) S. Plant about 1 ft. high. L. 1 ft. long. Bracts green. Calyx ¾ in. long. Corolla white, twice as long as the calyx. British Honduras.

Tillandsia fenestralis. (*B. M.* t. 6898.) S. [Syn. *Vriesia fenestralis*, Linden & André.]

Tillandsia foliosa. (*B. H.* 1885, 249.) S. A showy species with an ample pyramidal panicle of violet fl. Mexico.

Tillandsia Fuerstenbergii. (*Fl. and P.* 1882. 107.) S. L. glaucous, linear-lorate, finely toothed; fl.-spikes erect, with lanceolate rosy bracts dusted with a whitish meal.

Tillandsia Gardneri. (*G. C.* 1878, x. 461.) S. L. everywhere densely covered with silvery scales, 6–8 in. long, flat in the lower part, narrowed from ½ in. broad at the base to a reflexed subulate convolute point. Scape 2–4 in. high, densely sheathed with linear-subulate lepidote l., bearing 4–8 short distichous crowded spikes; bracts lepidote; calyx glabrous; pet. purplish, small. Grown under the name of *T. argentea* in English gardens. Brazil.

Tillandsia Geissei. (*Gfl.* t. 1302, f. 2; *R. H.* 1889, 388.) S. A small species with linear-subulate channelled silvery l. and a fl.-stem about 6–8 in. high, ending in a simple few-flowered spike of rosy fl.; bracts green at the base, carmine above. Chile.

Tillandsia hieroglyphica. (*Bull Cat.* 1883, 16; *Ill. H.* 1884, t. 514.) S. L. ligulate, acute, recurved, pale green, with transverse bands of irregular character-like markings of a dark green on the upper, and deep chocolate-purple on the lower surface.

Tillandsia inflata. (*B. M.* t. 6882.) S. This plant is better known as *Vriesia incurvata*. [*Tillandsia incurvata*, Baker.] Brazil.

Tillandsia karwinskiana. (*G. C.* 1878, x. 460.) S. About 1 ft. high. L. 20–30 in a dense rosette, 1 ft. long, narrowed from 1 in. broad at the base to a long point, pale green, lepidote on

the back, nearly or quite naked on the face. Scape 9–12 in. long, with 1–12 violet fl. arranged in a lax narrow single distichous spike; calyx glabrous, glossy, green. Mexico.

Tillandsia kirchoffiana. (*Gfl.* 1889, 107, f. 22.) S. L. subulate from a bulbous base, recurved, green. Infl. a slender panicle with coral-red bracts and blue fl. Mexico.

Tillandsia leodiensis. (*Gfl.* 1893, 340; *G. C.* 1893, xiii. 580.) S. A garden hybrid between *T. morreniana* and *T. Barilletii.*

Tillandsia Lindeni, flore pleno. (*R. H.* 1881, 280.) S. A partially double-flowered variety.

—— Var. **koutsinskyana.** (*Year-book*, 1881, 177.) S. [Syn. *Phytarrhiza Lindeni*, E. Morr. var. *koutsinskyana.*]

—— Var. **splendida.** (*R. H.* 1882, 12, t.) S. This is the same as the var. *major.*

—— Var. **tricolor.** (*G. C.* 1883, xix. 693; *R. H.* 1885, 422.) A form with large bright rosy bracts, and blue fl. [Syn. *T. tricolor*, Hort., not Schlecht. & Cham.] Ecuador.

—— Var. **violacea.** (*G. C.* 1883, xix. 693.) S. A small form with erect roundish rosy bracts and violet fl. Ecuador.

Tillandsia lineata. (*G. C.* 1883, xix. 693.) S. L. rounded, deep green, with dark violet longitudinal lines.

Tillandsia Malzinei. (*B. M.* t. 6495.) S. [Syn. *Vriesia Malzinei*, Year-book 1876, 162.]

Tillandsia massangeana superba. (*Gard.* 1892, xli. 430.) S. A fine plant of vigorous growth; the foliage blotched and transversely barred with a dark bronzy shade upon a paler ground. [Probably a var. of *T. splendens*, Brongn.]

Tillandsia microxiphion. (*B. M.* t. 7320.) S. A species of the subgenus *Anoplophytum* and a near ally of *T. stricta.* It has short erect tufted stems clothed with linear lepidote l. 1 in. long, and terminated by an erect few-flowered spike clothed with pink bracts and deep blue fl. Monte Video.

Tillandsia Mœnsii. (*Gard.* 1892, xli. 430.) S. A species with elegantly recurved foliage veined or mottled with pale green upon a yellowish green ground.

Tillandsia narthecioides. (*G. C.* 1878, ix. 8.) S. per. with the general habit of *Vriesia glaucophylla.* L. 1–2 ft. long, ¼–⅝ in. broad, linear-subulate, green, channelled down the face, sparsely white, lepidote beneath. Fl.-spike distichous, 1 ft. long, 1½ in. broad; fl. inconspicuous, yellowish white. Ecuador.

Tillandsia pastuchoffiana. (*Cat. Comp. Cont. d'Hort.* 1885, 9.) S. Allied to *T. fenestralis*, with broad recurved acuminate l. of a clear shining green, irregularly marked with a mosaic pattern of dark green lines. Brazil.

Tillandsia paucifolia. (*G. C.* 1878, x. 748.) S. A small species 4–5 in. high. L. 5–6 in a dense rosette, with large bulbous bases, covered on both sides with silvery scales. Scape very short, with a simple erect distichous 3–4-flowered spike, 1½–2 in. long, 5–6 in. broad. Fl. violet. [*T. bulbosa*, Hook. var.]

Tillandsia polytrichoides. (*B. H.* 1880, 240.) S. A small moss-like plant with slender branched stems clothed with small lanceolate-subulate l. Fl.-stem capillary, 2 in. long, with a small distichous spike of 3–4 fl. [*T. bryoides*, Griseb.] Brazil, &c.

Tillandsia reticulata. (*G. C.* 1887, i. 140.) S. This is the plant also known in gardens as *Guzmannia reticulata* and *Vriesia reticulata.*

Tillandsia Roezlii. (*B. H.* 1877, 272, t. 15.) S. L. long, broad, linear, acute, with their margins incurved, dark green, with large black blotches on the apical part. Fl. rosy, in distichous branched spikes. Peru.

Tillandsia streptophylla. (*B. H.* 1878, 296, t. 18, 19; *B. M.* t. 6757.) S. L. numerous, reflexed, long, channelled, tapering to a stout more or less curled apex, covered with greyish scales. Infl. panicled; bracts on the main axis and at the base of the lateral spike all red, the rest green; spikes narrow, distichous, dense, 6–12-flowered; fl. small, exserted, violet. Mexico.

Tillandsia Tectorum. (*B. H.* 1877, 328, t. 18.) S. This is the plant known as *T. argentea*.

Tillandsia tricolor. (*B. H.* 1879, 162, t. 10–11.) G. L. contracted above the very broad base, linear, acuminate, gracefully arching, 1 ft. long. Fl. stem 1½ ft. high, red, covered with reduced l. Spikes 3–4, crowded together, distichous. Bracts green. Fl. violet, tipped with white. [*T. punctulata*, Cham. & Schlecht. var.] Mexico.

Tillandsia umbellata. (*R. H.* 1886, 60, t.) G. L. arching, linear, green, 10–14 in. long; spike short, of 5–6 fl. Fl. 2½ in. in diam., of a brilliant blue, with a white feathered blotch at the base of each pet. Andes of Ecuador.

Tillandsia usneoides. (*B. M.* t. 6309.) S. Of pendulous moss-like habit, covered with a greyish scurf. Stems long, filiform, much-branched. L. filiform, 1–3 in. long. Fl. terminal, small. ¼ in. in diam., pale green. Tropical America.

Tillandsia vestita. (*G. C.* 1887, i. 670.) S. One of the broad-spiked group. Stem short. L. not crowded, linear-subulate, 5-6 in. long, ½ in. broad, channelled, clothed with white scales. Fl.-stem 6 in. high; fl. in a simple distichous spike, yellow, with bright red glabrous bracts. Mexico.

Tillandsia virginalis. (*B. H.* 1880, 238; *G. C.* 1881. iii. 717, f. 93.) S. A species of moderate size, with a rosette of lorate pale green mealy l., and a scape 2 ft. high, with a distichous spike of large white fl. Bracts green, mealy. Mexico.

Tillandsia xiphioides Arequitæ. (*R. H.* 1893, 156, t.) S. A fine var. with larger whiter l., longer infl., and more numerous and whiter fl. than the type. Uruguay.

Tinnea æthiopica dentata. (*B. M.* t. 6744.) Labiatæ. S. A small shr. with opposite elliptic slightly toothed l. and axillary brown-purple fl. Calyx large, cylindric, 2-lipped, enclosing the whole of the corolla-tube. Tropical Africa.

Tobolewskya clavata. (*Gard.* 1892, xli. 484.) A misprint for *Sobolewskya clavata*, which see.

Todea arborea bipinnatifida. (*G. C.* 1896, xix. 652.) Filices. G. A var. with finely divided fronds lighter in colour and more elegant than the type.

Todea grandipinnula. (*G. C.* 1886, xxv. 752.) G. A handsome species with broadly ovate tripinnate fronds 1–1½ ft. long, 8–9 in. broad, pellucid-membranous. Pinnæ sessile, crowded, oblong-ovate. Pinnules overlapping, 1¼ in. long, ovate, pinnatifid. [*T. Moorei*, Baker.] Lord Howe's Island.

Todea intermedia. (*Ill. H.* 1877, t. 290.) G. Fronds 12–20 in. long, 6–8 in. broad, tripinnatifid, gracefully spreading; petiole naked at base, winged above; pinnæ dense, narrow, lanceolate, bright green. New Zealand.

Todea Moorei. (*G. C.* 1894, xv. 526.) G. Described as a dwarf tree-fern from Lord Howe's Island. It is apparently identical with *T. grandipinnula*.

Todea plumosa. (*Veitch Cat.* 1879, 27, f. 19; *G. C.* 1878, ix. 565.) G. A var. of *T. superba*, of dwarf compact habit. The surface of the fronds is moderately bristling with small erect segments, as in *T. intermedia*, but the fronds are shorter and more ovate, recurved, as are also the pinnæ, while the ultimate segments are turned up.

Torenia Bailloni. (*F. M.* t. 331; *B. H.* 1879, 21, t. 1. f. 2; *Ill. H.* 1878, t. 324; *R. H.* 1879, 69, f. 15.) Scrophulariaceæ. S. herb with petiolate ovate serrate acute l., and large bright yellow fl., with the throat and tube blackish purple. [*T. flava*, Buch.-Ham.] Tropical Asia.

Torenia exappendiculata. (*GH.* t. 892.) S. herb. with hairy erect square branching stems: branches diffuse, bent at the nodes. L. stalked, ovate-lanceolate, acute, serrate, green. Fl. terminal, sub-umbellate. Calyx oblong, 5-winged and toothed. Corolla nearly twice as long as the calyx, tubular with a short 5-lobed not very spreading limb ⅓ in. in diam., white, with the 2 side lobes rich blue. [*T. pedunculariis*, Benth.] Malaya.

Torenia flava. (*B. M.* t. 6700.) S. This is the pendulous form of the plant generally known as *T. Bailloni*. Tropical Asia.

Torenia Fordii. (*B. M.* t. 6797.) S. A small-flowered species with cordate-ovate toothed l. and axillary pale straw-coloured fl. with a purple spot on each of the side lobes of the corolla. China.

Torenia Fournieri compacta. (*Gfl.* 1887, 667, f. 172.) S. Garden variety.

Tournefortia cordifolia. (*R. H.* 1887. 128, f. 26, 27.) Boraginaceæ. G. or H. H. Shr. of bold habit, clothed with short hairs. L. opposite, growing to 1 ft. in length, cordate, acute, on petioles 3–4 in. long. Fl. small, white, in large terminal corymbose cymes. Tropical America.

Tovaria oleracea. (*B. M.* t. 6313.) Liliaceæ. H. per. with a tall simple sub-erect stem, leafy from the middle to the base of the infl., flexuose and pubescent in the upper part. L. 6–7 in. long, alternate, oblong, acuminate, shortly petiolate, membranous, glabrous above, minutely pubescent beneath. Fl. in a deltoid terminal panicle, minutely bracteate. Pedicels $\frac{1}{4}$ in. long, deflexed or ascending. Perianth globose, about $\frac{1}{4}$ in. long and broad, white, tinged with rose outside. Stamens half as long as the corolla; anthers yellow. Ovary globose; style short; stigmas 3. Berries rose-purple with dark spots. [*Smilacina oleracea*, Hook. f. & Thoms.] Sikkim.

Trachycarpus Griffithii. (*R. H.* 1879. 212, f. 43.) Palmæ. G. [*T. martianus*, H. Wendl.] East Bengal; Burma.

Trachycarpus khasyanus. (*B. M.* t. 7128.) S. This species has been in cultivation many years under the names *T. Griffithii*, *Chamærops Griffithii* and *C. martiana*. [*T. martianus*, H. Wendl.] Eastern Bengal; Burma.

Tradescantia decora. (*Bull Cat.* 1892, 3.) Commelinaceæ. S. foliage plant. L. elongate, lanceolate, dark olive-green, with a median band of silvery grey. Brazil.

Tradescantia elongata. (*G. C.* 1893, xiii. 474.) S. L. longer and narrower than in *T. Reginæ*, dark green, with bands of silvery white, and a dull purple tinge down the midrib.

Tradescantia navicularis. (*Gfl.* t. 901.) S. herb. per. of diffuse procumbent habit. L. crowded or distant, sheathing, ovate-oblong, acute, very concave, two ranked, spreading, green above, green or purplish with darker nerves beneath. Umbels terminal, sessile, many-flowered. Sep. spreading, narrow, boat-shaped, half as long as the 3 broadly ovate, bright rose petals. Peru.

Tradescantia Reginæ. (*Ill. H.* 1892, t. 147: *G. C.* 1892, xi. 696, f. 102.) S. Foliage plant with erect stems bearing distichous lanceolate acuminate l. about 6 in. long, whitish green, with the central part and margins transversely veined with dark green, and washed with purple along the midrib: the underside is purple. Peru.

Tradescantia superba. (*Ill. H.* 1892, t. 155.) S. foliage plant with ovate-oblong acute l. dark green with a whitish stripe on each side of the midrib, purple beneath. Peru.

Tradescantia velutina. (*G. C.* 1893, xiii. 475.) S. L. close, short, hairy, purple in the centre, with a narrow band of silvery white on each side.

Tragopyrum lanceolatum latifolium. (*Gfl.* t. 1344, f. 1–3.) Polygonaceæ. H. shr. A form with broad l. [*Atraphaxis Laxmanni*, Agardh.] Russia; Central Asia.

Trevesia eminens. (*Bull Cat.* 1884. 17, f. 8.) Araliaceæ. S. shr. with long-stalked palmatisect l. divided into about 9 lanceolate serrate segments. Philippines.

Trianea bogotensis. (*Gfl.* t. 980.) Hydrocharidaceæ. S. aquatic with stoloniferous floating stems with 2–3 orbicular l. at the nodes, flat above, very convex beneath (sub-hemispherical). Fl. small, pedunculate; perianth 6-partite. [*Limnobium bogotense* Kunth.] Colombia.

Trias picta. (*G. C.* 1888, iii. 488.) Orchidaceæ. S. A small orchid with 4-angled pseudobulbs, narrow ovate acuminate fleshy l., and fleshy fl. $\frac{3}{4}$ in. in diam., honey-coloured, densely spotted with reddish purple. Burma.

Trias vitrina. (*K. B.* 1895, 282.) S. A small plant with a creeping rhizome, and ovoid one-leaved pseudobulbs; l. 3 in. long; fl. solitary on short pedicels, pale green, with a few spots of brown on the lip. Tenasserim.

Trichocaulon piliferum. (*G. C.* 1883, xix. 501.) Asclepiadaceæ. G. succulent of interesting character, with thick many-angled stems having spiny tubercles along the angles, and small dark purple-brown fl. South Africa.

Trichocaulon piliferum. (*B. M.* t. 6759.) G. succulent with stout cylindric stems covered with numerous vertical rows of tubercles, each of which bears a stout bristle. Fl. solitary, sessile, ½ in. in diam., dark purple-brown. Namaqua Land (?).

Trichocentrum albiflorum. (*K. B.* 1893, 336.) Orchidaceæ. S. Allied to *T. candidum*. L. ovate, about 1 in. long; raceme as long as the l.; fl. about 1 in. across with a short, bidentate spur, white, with a tinge of purple at the base of the lip. Mexico.

Trichocentrum albo-purpureum striatum. (*L.* ii. t. 85; *G. C.* 1887, ii. 108.) S. A var. having a large purple blotch on each side of the base of the lip, and the apical part striped with the same colour. North Brazil.

Trichocentrum fuscum Kramerii. (*G. C.* 1885, xxiv. 198.) S. A large-flowered var. with a longer and thinner spur than usual. Mexico.

Trichocentrum Hartii. (*K. B.* 1894, 395.) S. Allied to *T. fuscum*; l. fleshy, oblong, 2 in. long; scape 1 in. long; fl. 1 in. in diam., light yellow; lip white and red-brown. Venezuela.

Trichocentrum Hœgei. (*G. C.* 1881, xvi. 717.) S. A small plant. L. robust, horny, cuneate-oblong, acute. Peduncle zigzag, bearing a very large fl. Sep. and pet. greenish yellow, with a purple middle area. Lip pandurate, undulate, notched at the tip, white, with a number of brilliant purple lines and blotches, and two blunt yellow calli at the base. Spur with a clavate notched apex. Mexico.

Trichocentrum ionophthalmum. (*G. C.* 1876, vi. 100.) S. In the way of *T. albo-purpureum*, but with broader and shorter l. Racemes short, 1-flowered. Upper sep. and pet. unguiculate, blunt, very light yellowish maroon-brown, with brown dots at their top; lateral sep. brown. Lip pandurate, whitish, with a large violet blotch on each basilar angle. Brazil.

Trichocentrum orthoplectron. (*G. C.* 1883, xix. 562.) S. Near *T. ionophthalmum*, but with a cuneate pet. and a straight spur. Sep. and pet. brown, with ochraceous brown-spotted tips; lip white, with a yellow disk, having 2 spots and 5 stripes of a crimson-lake colour at its base. Central America (?).

Trichocentrum Pfavii. (*G. C.* 1881, xvi. 70.) S. Fl. in pairs on a raceme, as large as those of *Oncidium Gardneri*. Sep. and pet. spathulate, obtuse, half brown, half white; lip cuneate, flabellate, bilobed, crisp, white, with a red blotch on the middle of its stalk. Central America.

—— **Var. zonale.** (*G. C.* 1883, xix. 44.) S. An interesting and variable form with obtuse or acute sep. and pet. which are entirely brown at their base or the brown broken up into blotches, with one large purple blotch or two darker ones before the base of the lip.

Trichocentrum Porphyrio. (*Ill. H.* 1884, t. 508.) S. Much in the way of *T. purpureum*, with oblong acute l. and solitary purple fl. having the margins of the sep., pet. and lip, and a rectangular area on the disk of the lip, light yellow. Central America (?).

Trichocentrum tigrinum splendens. (*L.* i. t. 24.) S. A fine var. having the base of the large obcordate lip of a rich purple colour. Central America.

Trichocentrum triquetrum. (*G. C.* 1891, ix. 701; *Gfl.* 1891, 390; *L.* vi. t. 311.) S. A species with the habit of an *Iris*, 6 in. high; fl. straw-coloured; lip variegated with orange. Ovary triquetrous, spur 1¼ in. long. Peru.

Trichocladus grandiflorus. (*G. C.* 1894, xvi. 134; *B. M.* t. 7418.) Hamamelidaceæ. G. A handsome tree, 20 ft. high, with lanceolate green l. 6 in. long, and short clusters of white fl. with strap-shaped pet. 1 in. long. The genus is allied to the Witch Hazels. South Africa.

Trichodesma physaloides. (*G. C.* 1892, xi. 363, f. 51.) Boraginaceæ. G. A herb. per. with a fleshy rootstock, annual erect stems, glaucous green l., and pure white fl., with a purple calyx. South Africa.

Trichoglottis cochlearis. (*G. C.* 1883, xix. 142.) Orchidaceæ. S. A small species with unequally bilobed l., and a short zigzag few-flowered raceme; fl. white, with purple bars on both sides of the sep. and pet.; lip spoon-like, very thick, with a few purple blotches. Sumatra.

Trichomanes Fraseri. (*G. C.* 1890, xx. 266.) Filices. G. A species with creeping rootstock, small erect pale green naked fronds which are sub-flabellate, ¼ in. long, lobed; sori confined to the top lobes. West Indies.

Trichomanes Hartii. (*G. C.* 1882, xviii. 680; *Fl. and P.* 1883, 11.) S. fern with short slender stems, tufted stipites 2–4 in. long, winged above, and deltoid tripinnatifid fronds 3–6 in. long, dark green, glabrous; pinnæ in 8–12 pairs, crowded, sessile, the lowest deltoid, the rest lanceolate. Sierra Leone.

Trichomanes labiatum. (*G. C.* 1885, xxiv. 7.) S. Filmy-fern with variably-shaped fronds, roundish and cordate at one or both ends, or subovate and narrowed to base and apex, pellucid, dark green; veins flabellate, forked, having a distinct midrib only in the fertile fronds; sori confined to the apex, usually 1, rarely 2–4; involucres tabular, free or slightly sunk, with tufts of hairs on the margined sides; lip large, expanded, and rounded. British Guiana.

Trichomanes pinnatinerve. (*G. C.* 1886, xxv. 787.) S. A minute Filmy-fern with a dark tomentose thread-like rootstock, and scattered ovate fronds 2–3½ lines long, 1–2 lines broad, on dark tomentose stipites ¼–1 line long, pellucid, clear bright green. British Guiana.

Trichopilia backhousiana. (*G. C.* 1876, v. 816.) Orchidaceæ. G. Allied to *T. fragrans*, but paler green, and thinner in texture. L. oblong, acute, faintly clouded with darker patches. Lip much narrower than in *T. fragrans* and lobed near the end. Colombia.

Trichopilia brevis. (*L.* vii. t. 332; *G. C.* 1895, xviii. 641, f.) G. A pretty species with long narrow pseudobulbs, lanceolate acute l., and short racemes of 2–3 fl. Sep. and pet. narrow, dull yellow, blotched with red-brown: lip with a short campanulate tube, white, with a yellow stain in front. Peru.

Trichopilia coccinea flaveola. (*G. C.* 1880, xiv. 358.) G. A var. with greenish yellow sep. and pet., a white lip, and white column. Costa Rica.

Trichopilia kienastiana. (*G. C.* 1883, xx. 166.) G. Near *T. suavis*, with white fl. marked with a few yellow lines and spots on the disk of the three-lobed lip.

Trichopilia laxa flaveola. (*G. C.* 1884, xxii. 520.) G. A var. with whitish yellow sep. and pet. instead of brownish red ones. Colombia.

Trichopilia Lehmanni. (*Gfl.* t. 1276, f. 2.) G. Something in the way of *T. fragrans*, but with a 1-flowered peduncle. Pseudobulb ovate, compressed. L. solitary, oblong-lanceolate, obtuse. Scape 2–3 in. long, bracteate. Ovary white. Sep. and pet. linear-lanceolate, acute, 1½ in. long. Lip with a large oblong front lobe. Fl. white, with a yellow spot in the throat of the lip.

Trichopilia punctata. (*G. C.* 1890, vii. 227; *O.* 1890, 65.) G. Remarkable in having both sep. and pet. studded with numerous reddish purple spots. Costa Rica.

Trichopilia suavis alba. (*L.* i. t. 2.) G. A form with pure white fl. marked on the disk of the lip with a 3-lobed yellow blotch. Central America.

Trichopus zeylanicus. (*B. M.* t. 7350.) Dioscoreaceæ. S. A dwarf plant with a woody rootstock, from which spring numerous short wiry trigonous stems, each bearing a cordate lanceolate l. 2½ in. long, and several star-shaped purple fl. on slender stalks; fr. trigonous, winged. South India; Ceylon.

Trichosma suavis meulenaereana. (*J. O.* 1894, 330.) Orchidaceæ. G. This differs from the type in the lip not having a large yellow blotch and in being strongly lined with violet-purple instead of red-brown. Sikkim and Khasia.

Trichostema Parishii. (*Fl. and P.* 1882, 12.) Labiatæ. H. H. per. Stems simple, 1–1½ ft. high. L. linear, entire. Infl. clothed with purple woolly hairs. Fl. bluish purple, with long projecting stamens; spikes long, virgate, interrupted. [*T. lanatum*, Benth.] South California.

Tridax bicolor rosea. (*G. C.* 1887, ii. 428, 553, f. 108.) Compositæ. H. A pretty annual of dwarf habit, with stalked ovate l. slightly glandular-hairy, and long-stalked heads 1½ in. in diam., with rosy lilac ray-florets and yellow disk. Mexico.

Trigonidium latifolium. (*O. R.* 1894, 271.) Orchidaceæ. S. First described in 1837, but only recently introduced into cultivation. It has oblong acute l. 6 in. long and 2 in. broad; sep. and pet. yellow and purple; lip with a fleshy yellow front lobe and narrow purplish side lobes. Brazil.

Trillium nivale. (*B. M.* t. 6449.) Liliaceæ. H. tuberous per. 3–4 in. high. L. 3 in a whorl, shortly petioled, ovate-oblong, rather acute, 1½ in. long. Fl. 1½ in. across; sep. lanceolate, obtuse, green; pet. obovate-oblong, pure white. Northern United States.

Trillium sessile californicum. (*G. and F.* 1890, 321, f. 44.) H. A robust large-flowered form from California.

Tristania densiflora. (*R. H.* 1881, 420.) Myrtaceæ. G. shr. with opposite entire ovate coriaceous l., and numerous 3-flowered cymes of crimson fl. Australia.

Triteleia uniflora cœrulea. (*R. H.* 1893, 256, t.) Liliaceæ. H. A form differing from the type in having porcelain blue fl. [*Brodiæa uniflora*, Benth. & Hook. f.]

Trithrinax acanthocoma. (*Gfl.* t. 959.) Palmæ. S. Stem dwarf, clothed with the persistent netted sheaths, armed with numerous stout reflexed spines. L. large, flabelliform, cut to ⅔ the way down into numerous linear bifid segments. Spadix branched. Rio Grande.

Trithrinax campestris. (*B. T. C.* 1889, 337.) S. Palm of majestic appearance, allied to *T. braziliensis*, but differing in having the leaflets shortly bifid, with a white tomentum above, glabrescent beneath, and the branches of the spadix stouter. South Argentine.

Tritoma Canari. (*R. H.* 1888, 295.) Liliaceæ. H. A yellow-flowered form of *Kniphofia aloides*.

Tritoma hybrida. (*B. T. C.* 1891, 81.) Liliaceæ. H. Under this name a large number of garden hybrids derived from *Kniphofia Uvaria*, *K. Macowani*, *K. Rooperi*, and *K. Burchellii*, are briefly described.

Tritoma maroccana. (*R. H.* 1878, 255.) H. Resembling *Kniphofia aloides*, but dwarfer, and with fewer narrower and shorter l. [*Kniphofia pumila*, Kunth.]

Tritoma nobilis. (*R. H.* 1882, 24.) H. This is merely a luxuriant form of *Kniphofia aloides*.

Tritoma Saundersii. (*R. H.* 1882, 504, t.) This is *Kniphofia aloides* var.

Tritonia Pottsii. (*B. M.* t. 6722; *R. H.* 1884, 312.) Iridaceæ. This is the plant which is generally known as *Montbretia Pottsii*.

Tritonia Wilsoni. (*G. C.* 1886, xxvi. 38.) G. A small-flowered *Gladiolus*-like plant with narrow linear l. and a simple or branched lax spike of white fl. flushed with purple, about 1 in. in diam., with obovate cuspidate segments. Port Elizabeth, South Africa.

Trochetia blackburniana. (*B. M.* t. 7209.) Sterculiaceæ. S. A *Hibiscus*-like shr. with obovate l. and drooping axillary cupped fl. 1 in. across, coloured white and crimson. Mauritius.

Trochodendron aralioides. (*B. M.* t. 7375; *G. C.* 1894, xv. 725, f. 91.) Magnoliaceæ. H. An evergreen shr. with the habit of *Heptapleurum*; l. ovate 3–4 in. long, shining, green; fl. in erect terminal sessile racemes, star-like, green, ¾ in. in diam. Japan.

Tropæolum digitatum. (*Gfl.* t. 1146.) Geraniaceæ. G. climber. A pretty species with fibrous root, peltate 5–7-lobed l. with reddish veins, and solitary yellow fl. 1 in. in diam.; calyx green, with a long red spur; pet. beautifully fimbriate. Venezuela.

Tropæolum Leichtlini. (*R. H.* 1895, 381.) H. A garden hybrid between *T. polyphyllum* and *T. edule*.

Tulbaghia natalensis. (*G. C.* 1891, ix. 668.) Liliaceæ. G. Resembles *T. alliacea* in leaf and habit, but has the perianth-segments longer than the tube. Fl. greenish white, fragrant. Natal.

Tulipa Alberti. (*Gfl.* t. 912; *B. M.* t. 6761.) Liliaceæ. H. Allied to *T. Greigi*. Bulb-coats with adpressed hairs inside; stem and peduncle minutely puberulous, 3-leaved. L. varying from narrow-lanceolate to elliptic-lanceolate, more or less undulate, glaucous green, pruinose. Fl. scarlet, scarlet-yellow, or purple; the three outer segments elliptic-lanceolate, acute, with spreading tips; the three inner ones broadly obovate, obtuse or emarginate, concave, slightly incurve-hooded. Turkestan.

Tulipa altaica. (*Gfl.* t. 942, f. a, e, g, h.) H. bulb with 4–5 linear-lanceolate l., 5–6 in. long, ½ in. broad; scape shorter or scarcely longer than the l.; perianth-segments 1½ in. long, the outer ones acute, the inner obtuse, all entirely scarlet-red, except just at the base where they are slightly yellowish; anthers yellow, acuminate. Siberia.

Tulipa Batalini. (*Regel, Descr.* 4; *Gfl.* t. 1307, f. 2; *G. C.* 1889, vi. 469; 1896, xix. 759, f.) H. Scales of the bulb bearded at the apex inside with brown wool. L. linear-lanceolate. Fl. pale yellow. Filaments glabrous. Bokhara.

Tulipa billietiana. (*B. M.* t. 7253.) H. A fine showy tulip allied to *T. Didieri*, with lemon-yellow segments sometimes tinged with red. Upper Savoy.

Tulipa Borszczowi. (*Gfl.* t. 1175, f. g–k; *B. M.* t. 6635.) H. L. spreading, lanceolate, acuminate, pale glaucous green, with crisped edges. Fl. bright crimson, with a black oblong blotch at the base of the cuspidate segments, which are not spreading. Persia and Turkestan.

Tulipa brachystemon. (*Gfl.* t. 1099, f. 2, 3.) H. A small species, with 2–3 broad linear acute canaliculate erect l.: fl. about 1 in. in diam., yellow, with the outer segments tinged with purple on the back. Stamens short, with broad obovate glabrous filaments. Turkestan.

Tulipa chrysantha. (*B. T. C.* 1894, 230.) H. A species with scented yellow fl., not spotted at the base. Persia, &c.

Tulipa ciliatula. (*G. C.* 1890, vii. 640; *Gfl.* 1890, 426.) H. Nearly allied to *T. undulatifolia*, differing chiefly from that species in the shorter obtuse perianth-segments, and from *T. praecox* by its sub-glabrous bulb-scales. Fl. bright crimson. Asia Minor.

Tulipa concinna. (*G. C.* 1893, xiii. 538.) H. A species with crimson fl. allied to *T. undulatifolia*, *T. ciliatula* and *T. Dammanni*. Taurus.

Tulipa cuspidata. (*Gfl.* t. 1147, f. 1, a–c.) H. L. erect, linear-lanceolate, channelled, glaucous; fl. solitary, campanulate; segments cuspidate at the apex, ciliate at the base; outer ones white, with the apex and base yellowish; inner ones narrower, pale green, with faintly reddish margins. Filaments tumid at the base, with a ring of hairs at the top of the swelling. On the plate this plant is called *T. Elwesi*.

Tulipa Dammanni. (*Regel. Descr.* 4; *W. G.* 1889, 352, f. 61; *Gfl.* t. 1300, f. 2.) H. In the way of *T. linifolia*, having the bulb-scales villous inside, linear-lanceolate l. ciliolate on the margin, and purple fl. marked with a black blotch at the base of the segments. Filaments glabrous. Mount Lebanon.

Tulipa Didieri. (*B. M.* t. 6639; *Fl. and P.* 1882, 140.) H. One of the finest of the tulips with broad lanceolate rather glaucous l., and large crimson fl. with a blackish purple yellow-margined spot at the base of each segment. Europe.

Tulipa fransoniana. (*G. C.* 1878, ix. 756.) H. Nearly allied to *T. Didieri*, with fine brilliant scarlet fl., having a dark blotch covering the whole of the claw, and narrowly bordered with white. South Europe.

Tulipa Greigi æstuans. (*Gfl.* 1888, 333.) H. Large-flowered form. Fl. reddish yellow, the bases of the perianth-segments but inconspicuously coloured.

—— Var. **aurea.** (*Gfl.* 1888, 334.) H. A yellow large-flowered var.; perianth-segments red outside. Forms of it are:—*aurea spectabilis* (by a misprint *opidubilis*), with red spots in the centres of the perianth-segments; *aurea superba*, as the last but with black spots at the base of the segments; *aurea zonata* with a red belt across the perianth-segments.

Tulipa Greigi carminea. (*Gfl.* 1888, 333.) H. Fl. carmine-scarlet with black spots at the base of the perianth-segments.

—— Var. **compta.** (*Gfl.* 1888, 333.) H. Fl. intense red, with the base of the perianth-segments yellow.

—— Var. **imperialis.** (*Gfl.* 1888, 334.) H. Perianth-segments 8, red with a black base.

—— Var. **parviflora.** (*Gfl.* 1888, 334.) H. A small-flowered var.; fl. scarlet, with black spots, edged with yellow on the bases of the perianth-segments. It has forms as follows:—*parviflora amœna*, outer perianth-segment intense red outside; all with a large black spot at the base; *parviflora aurea*; fl. yellow; centres of the perianth-segments with a red spot; *parviflora chrysantha*, fl. like those of the last, but with 8 perianth-segments; *parviflora sulphurea*, fl. sulphur yellow.

—— Var. **picta.** (*Gfl.* 1888, 334.) H. A large-flowered form; perianth-segments yellow with in the centre a red spot bordered with black; outer segments tipped with red.

—— Var. **pulchella.** (*B. T. O.* 1895, 352, t. 12.) H. Said to be a hybrid between *T. Greigi* and *T. kaufmanniana*.

—— Var. **Victoriæ.** (*Gfl.* 1888, 333.) H. A large-flowered form; perianth-segments red with yellow streaks.

Tulipa grisebachiana. (*G. C.* 1884, xxi. 542.) H. Much like *T. sylvestris*. Bulb ovoid; outer tunics brown, glabrous; stem 1 ft. long, 1-flowered, glaucous; l. 3, very glaucous, erect, 6–7 in. long, $\frac{1}{3}$–$\frac{3}{4}$ in. broad, concave. Fl. faintly scented, under 2 in. long, lemon-yellow. Herzegovina.

Tulipa Harmonia. (*Damm. Cat.* 1893, 5.) H. An early-flowering form of *T. undulatifolia*, with large bright scarlet fl., which have large black gold-bordered spots at the base. Taurus.

Tulipa iliensis. (*Gfl.* t. 975, f. c-d, t. 982, f. 4–6; *B. M.* t. 6518.) H. Allied to *T. kaufmanniana*. A small species, with an ovoid bulb; tunic coats strigose-pilose inside at the apex; l. about 3, linear, channelled, 3–5 in. long, over-topping the fl.; perianth 1 in. in diam., pale yellow; outer segments reflexed, inner erect, all acute. Eastern Turkestan.

Tulipa kaufmanniana. (*Gfl.* t. 906, f. 6–10.) H. L. erect, linear-lanceolate, about as long as the peduncle, very minutely downy. Two varieties are named, viz.:—var. *albo-variegata*, perianth white inside, yellow towards the base, with the back of the 3 outer segments rose-coloured with white margins; and var. *luteo-variegata*, perianth pale yellow inside, with a red spot below the middle, the 3 outer segments rose-coloured on the back, with yellow margins. Turkestan.

—— Var. **pulcherrima.** (*R. H.* 1895, 175.) H. Probably a hybrid between *T. kaufmanniana* and *T. Greigi*.

Tulipa Kesselringii. (*Gfl.* t. 964; *B. M.* t. 6754.) H. L. 3–4, linear, strongly involute, 6–8 in. long, $\frac{1}{2}$ in. broad. Fl. solitary, campanulate, $1\frac{1}{2}$ in. long, yellow, with the 3 outer segments feathered with orange-red. Turkestan.

Tulipa kolpakowskiana. (*G. C.* 1878, x. 202; 1880, xiii. 652, f. 111; *B. M.* t. 6710.) H. With the general look of *T. australis*. Bulb ovoid, with its brown tunics slightly hairy inside. Stem 1 ft. high, glaucous, with about 3 linear or linear-lanceolate l. 6 in. long, less than 1 in. broad. Fl. campanulate $1\frac{1}{2}$ in. long, bright yellow, with the 3 outer segments flushed with red on the back. Turkestan.

Tulipa Leichtlini. (*Gard.* 1889, xxxv. 354.) H. Allied to *T. stellata*. L. erect or recurved, linear-lanceolate, acuminate. Scape 1 ft. high. Fl. large; outer segments shorter than the inner, rich purple-red, broadly margined with white; inner segments oblanceolate, yellowish white. Kashmir.

Tulipa Levieri. (*B. T. O.* 1894, 230.) H. Perhaps a form of *T. montana*. L. glaucous; fl. large, scarlet; segments with a basal black blotch margined with golden yellow. Persia.

Tulipa libanotica. (*Gfl.* 1888, 126.) H. Allied to *T. Boissieri* and *T. linifolia*, with flaccid linear l. wavy and ciliate on the margins. Scape glabrous. Fl. purple with an elongate blackish spot at the base of the oblanceolate segments. Anthers shorter than the filaments. Lebanon.

Tulipa linifolia. (*Gfl.* t. 1235, f. d–f; *R. H.* 1887, 144.) H. A small species, with about three linear-lanceolate wavy acute l. and a bright scarlet-red

fl. about 2 in. in diam., marked with a black spot at the base of the obovate obtuse segments. Central Asia.

Tulipa Maximowiczi. (*Regel, Descr.* 3; *Gfl.* t. 1307, f. 1; *G. C.* 1889, vi. 469; 1896, xix. 757, f.) H. Allied to *T. linifolia*, but with the bulb-scales hairy within at the apex, the stem leafy with alternate linear l., which have red minutely ciliolate margins; fl. scarlet-purple; outer segments marked at their base with a blue-black spot, bordered with white. Bokhara.

Tulipa ostrowskiana. (*Gfl.* t. 1144, f. 1, 2; *Fl. and P.* 1884, 58; *B. M.* t. 6895.) H. Allied to *T. Oculus-solis*, with linear-lanceolate glaucescent l., and bright red fl., 2 in. or more in diam., having a black spot at the base of each of the segments. Filaments very short, dilated, and, as well as the anthers, purple. Turkestan.

Tulipa polychroma. (*B. T. C.* 1894, 230.) H. A dwarf species nearly allied to *T. celsiana* and *T. stellata*. Persia.

Tulipa primulina. (*G. C.* 1882, xviii. 8; *B. M.* t. 6786.) H. Something like *T. sylvestris*, with 4–6 linear green glabrous l., and a campanulate primrose-yellow fl. 1 in. long, tinged with red on the outside of the outer segments. Stamens densely hairy at the base. The fl. are very fragrant. Mountains of Eastern Algeria.

Tulipa pulchella. (*B. M.* t. 6304.) H. Bulbs $\frac{1}{2}$–$\frac{3}{4}$ in. in diam., brown, glabrous or slightly pubescent at the top. L. 3–4 in. long, spreading close to the ground, linear or linear-lanceolate, $\frac{1}{4}$–$\frac{1}{2}$ in. broad, concave, glaucous green, obscurely ciliated. Scape 1–4 in. long, 1-flowered, glabrous. Fl. $1\frac{1}{2}$–2 in. in diam. Perianth-segments oblanceolate, acute, bright rose-red in the upper part, bluish lilac below, with a dark purple blotch on the claw. Stamens bearded at the base. Asia Minor.

Tulipa saxatilis. (*B. M.* t. 6374.) H. With about 3 glabrous linear-lanceolate l., attaining a length of 1 ft. Scape as long or longer than the l., usually branched below, and bearing 2 fl. Perianth 2–$2\frac{1}{2}$ in. long, campanulate-infundibuliform, bright pale lilac with a large bright yellow eye: segments all acute. Stamens bearded at the base. Crete.

Tulipa Schrenkii. (*B. M.* t. 6439.) H. Allied to *T. gesneriana*. Stem 6 in. high, sparsely hairy above, with 3–4 lanceolate slightly glaucous l., obscurely ciliated. Perianth-segments spreading, 1–2 in. long, oblong, obtuse, yellow or bright red with a yellow base. Stamens half as long as the perianth, glabrous; anthers yellow. Central Asia.

Tulipa Sintenisii. (*G. C.* 1891, i. 330; *B. M.* t. 7193; *W. G.* 1891, 156.) H. A curious dwarf Tulip nearly allied to *T. undulatifolia*, but differing chiefly in its more blunt perianth-segments, and flat l. Fl. pale glaucous red and scarlet with a black blotch on the claw. Turkish Armenia.

Tulipa Sprengeri. (*G. C.* 1894, xv. 716; *Gfl.* t. 1411.) H. A species resembling *T. Hageri*, without the black blotch inside. The filaments are also hairless and narrowed at the base. Armenia.

Tulipa sultanabadensis. (*B. T. C.* 1894, 230.) H. Nearly allied to *T. undulatifolia*. Fl. large, brilliant scarlet, with a black unbordered blotch at the base of the segments inside. Persia.

Tulipa triphylla. (*Gfl.* t. 942, f. b d; *B. M.* t. 6459.) H. A dwarf species with 3 linear channelled l., and rather small yellow fl. Turkestan.

—— Var. **Hœltzeri.** (*Gfl.* t. 1144, f. 3, 4 a–b.) H. A var. with linear-oblong glaucous undulate l. lying on the ground; fl. small, yellow, the 3 outer segments purplish. Turkestan.

Tulipa turkestanica. (*Gfl.* t. 1050, f. 2.) H. With broadly linear-lanceolate l., usually 2 in number. Fl. solitary, about $1\frac{1}{2}$ in. in diam., white, with the base of the segments yellow. Western Turkestan.

Tulipa undulatifolia. (*B. M.* t. 6307.) H. A species bearing 3–4 l. on the middle of the glaucous downy stem, 6–8 in. long, linear-lanceolate, acuminate, concave, glaucous green; the lower one 1–$1\frac{1}{4}$ in. broad, undulate. Peduncles 4–5 in. long. Fl. campanulate, $2\frac{1}{2}$ in. in diam.; segments lanceolate, attenuate, deep red inside, with an oblong black blotch bordered with yellow at the base, yellowish green, tinted with rose outside. Stamens black; pollen yellow. Asia Minor.

Tulipa violacea. (*B. T. O.* 1894, 231; *B. M.* t. 7440.) H. Fl. bright mauve-red, with a black blotch bordered with white at the base inside. Persia.

Tulipa vitellina. (*Gard.* 1889, xxxvi. 531.) H. A garden hybrid, probably between forms of *T. suaveolens* and *T. gesneriana*, 1–2 ft. high. Fl. large, delicate yellow: segments ovate, blunt; l. ovate-lanceolate, acute, glaucous.

Turræa obtusifolia. (*B. M.* t. 6267.) Meliaceæ. G. A much-branched shrub 4–6 ft. high, glabrous except young l. L. alternate or fascicled, ¾–1½ in. long, oblanceolate, obtuse, entire or obtusely 3–5-lobed towards the apex, bright green. Fl. solitary or fascicled on short peduncles. Calyx very small, campanulate, 5-toothed. Corolla 1½ in. in diam. Petals white, oblanceolate-spathulate, with long claws; claw erect; limb spreading. Stamens united into a long pale yellow tube surrounding the style, fringed at the top with horizontally spreading subulate processes. Stigma green, mallet-shaped, grooved on the sides. South Africa.

Tydæa Ceciliæ. (*Ill. H.* 1876, t. 260.) Gesneraceæ. S. A free-flowering per., softly hairy, 1–1½ ft. high. L. stalked, 2–4 in. long, 2–3 in. broad, ovate-cordate, greyish green, marbled along the veins with darker green and violet. Fl. in terminal bracteate heads, on long peduncles. Calyx 5-lobed; lobes ovate, shorter than the corolla-tube. Corolla 1 in. in diam.; the limb with 5 rounded lobes, bright rose, spotted with dark red; inside of tube white with orange-red spots. [*Isoloma.*] Colombia.

Tydæa hybrida nana. (*Gfl.* 1886. 505, f. 60.) S. A dwarf floriferous garden hybrid.

Tylophora oculata. (*K. B.* 1895, 112.) Asclepiadaceæ. S. Stems climbing. L. oblong-lanceolate, 3 in. long. Fl. on short umbellate cymes, ½ in. wide, purple. Sierra Leone.

Tylophoropsis yemensis. (*G. C.* 1894, xvi. 244.) Asclepiadaceæ. G. Stems twining: l. ovate-lanceolate, 2 in. long; fl. small, dull purple, in umbel-like cymes. Yemen, Arabia.

Ulmus campestris globosa. (*Späth Cat.* 1894-5.) H. An elm with l. like those of *U. campestris Berardi* but of globular habit.

Ulmus campestris umbraculifera nova. (*M. D. G.* 1896, 28.) Urticaceæ. H. A form of *U. campestris umbraculifera* with small leaves.

Umbilicus glaber. (*Gfl.* t. 1019, f. 1.) Crassulaceæ. H. succulent glabrous per., with rosulate spathulate-elliptic fleshy l., and an erect fl.-stem rising from beneath the l., bearing 2–3 fleshy elliptic-oblong l. and branching in a cymose-paniculate manner. Fl. pale greenish yellow. [*Cotyledon.*] Eastern Turkestan.

Umbilicus platyphyllus. (*Gfl.* t. 998, f. 2.) H. per. Radical l. rosulate, obovate-spathulate, obtuse or subacute, minutely papillose-hairy. Fl.-stem short; cyme corymbiform. Fl. white. Altai Mountains.

Umbilicus turkestanicus. (*Gfl.* t. 998, f. 1.) H. Radical l. in a dense rosette, flat, oblong-lanceolate, or spathulate-ovate, acute, puberulous, ciliate. Fl.-stem 2–6 in. high. Infl. cymose. Fl. white, with purple stripes outside. Turkestan.

Uncifera heteroglossa. (*G. C.* 1878, x. 234.) Orchidaceæ. S. Raceme rather short, pallid, closely speckled with red. Fl. as large as that of *Sarcanthus tricolor*, white (?). Sep. and pet. oblong, blunt; lip hollowed out, the front border thickened; spur ascending, hooked.

Uniola Palmeri. (*G. and F.* 1889, 400, f. 124.) Gramineæ. H. per. with rigid cane-like culms 2–4 ft. high, leafy to the top; l. erect, involute, with a long pungent apex; raceme of staminate plants 6–9 in. long, the branches in twos and threes; spikelets small, 7–9-flowered; raceme of fertile plants more dense, 4–6 in. long, the branches nearly sessile. Colorado, United States.

Uraria crinita. (*G. and F.* 1893, 424; *B. M.* t. 7377.) Leguminosæ. S. A dwarf erect per. with pinnate l. not unlike those of *Wistaria*, and erect racemes of purplish-rose fl. with conspicuous rose-coloured ciliated bracts. India; China.

Urceocharis Clibrani. (*G. C.* 1892, xii. 214, f. 36.) Amaryllidaceæ. S. A garden hybrid between *Eucharis grandiflora* and *Urceolina pendula.*

Urginea eriospermoides. (*G. C.* 1887, ii. 126.) Liliaceæ. G. bulb with 2

cylindric glossy l., $\frac{1}{6}$ in. in diam.; and a fl.-stem 2 ft. high, with a raceme of small whitish fl. South Africa.

Urginea macrocentra. (*G. C.* 1887, i. 702.) G. Bulb globose, 2 3 in. in diam. L. solitary, terete, erect, 1½ ft. long. Fl.-stem 3 ft. high, stout, with a dense raceme of ascending campanulate white fl., tipped with green; the lowest bracts with a curious convolute spur ¾ in. long. South Africa.

Uropetalum becazzeanum. (*Gn.* 1892, 611, f. 127.) Liliaceæ. G. bulb with tapering l. and lax racemes about 6 in. long, of drooping green fl. Abyssinia.

Ursinia pulchra. (*G. C.* 1887, i, 670.) Compositæ. H. annual. This is the familiar *Sphenogyne speciosa* of gardens, now referred to the genus *Ursinia*. South Africa.

Utricularia bifida. (*B. M.* t. 6689.) Lentibulariaceæ. S. Interesting marsh plant, with matted tufts of slender linear l., 1–2 in. long, and erect slender racemes of small *Antirrhinum*-like yellow fl. Asia, &c.

Utricularia Humboldtii. (*Gard.* 1892, xli. 362; *G. and F.* 1892, 113.) S. A semi-aquatic species with broad reniform l. on erect petioles 6 in. long, and scapes of pale lavender fl., larger than those of *U. montana*. British Guiana.

Utricularia janthina. (*B. M.* t. 7466.) S. A handsome species with reniform l. and large pale blue corollas, the rounded convex part of the lower lip being marked with two vertical golden bands edged with deep violet. In a wild state it grows in the axils of the leaves of a *Tillandsia*. Brazil.

Utricularia longifolia. (*Gard.* 1892, xli. 362; *G. C.* 1893, xiii. 713, f.) S. A semi-aquatic species with strap-shaped l., and short erect scapes of mauve fl. British Guiana.

Utricularia rhyterophylla. (*W. G.* 1889, 74.) S. A dwarf compact plant, with violet fl. marked with yellow on the palate. [*U. longifolia*, Gardn.]

Uvaria virens. (*K. B.* 1896, 16.) Anonaceæ. S. Stems hairy; l. oblong, 3–6 in. long; fl. sessile, in pairs, small, yellow-green. Delagoa Bay, South Africa.

Vaccinium Mortinia. (*B. M.* t. 6872.) Vacciniaceæ. G. or H. H. A much branched shrub with small ovate leathery l. and clusters of pretty rose-pink fl. about ¼ in. long. Corolla ovoid, with short recurved lobes. Andes of Ecuador.

Vallota purpurea delicata. (*G. C.* 1893, xiii. 641.) Amaryllidaceæ. G. A var. with pale red flowers.

Vanda amesiana. (*G. C.* 1887, i. 764; ii. 472; *W. O A.* t. 296.) Orchidaceæ. G. A charming species, having a short stem with l. like those of *Aerides affine*, and a long intl. of scented white fl. Sep. and pet. cuneate-oblong, subacute. Side lobes of lip small, nearly square; front lobe reniform, two-lobed, with 3 raised lines on the disk in front of a small transverse rounded tubercle. Spur conical, compressed, short. India.

Vanda arbuthnotiana. (*G. C.* 1892, xi. 522.) S. Near *V. Roxburghii*. It has bright green bilobed l. and golden-yellow fl. with purplish stripes. Malabar.

Vanda Bensoni tristis. (*G. C.* 1896, xix. 422.) S. A var. with fl. coloured sulphur-yellow outside and dirty brown within; lip whitish yellow with green side-lobes.

Vanda bicolor. (*G. C.* 1896, xix. 422.) G. Stem 3 ft. high; leaves 6–10 in. long, obtusely 2-lobed: scape stout, erect, 4–6-flowered; fl. 2 in. in diam., brownish purple, tesselated; lip margined with yellow and with large orbicular side-lobes. Himalaya.

Vanda Boxallii cobbiana. (*G. C.* 1881, xvi. 780.) S. A fine var. with large milk-white fl. with small short purple stripes at the base: the inner half of the lateral sep. is dark purplish brown; there are no apical blotches on the sep. and pet.

Vanda Charlesworthii. (*O. R.* 1894, 323.) S. A supposed natural hybrid between *V. cærulea* and *V. Bensoni*. Fl. 2½ in. in diam., texture as in *V. cærulea* but veined and marbled with purple; lip as in *V. Bensoni*. Burma.

Vanda Clarkei. (*K. B.* 1888, 122.) S. Much in the way of *Arachnanthe Cathcarti*, with cuneate oblong obtuse sep. and pet. of a dark brown, barred with ochre, yellow outside; the lateral sep. and pet. curved. Lip 3-lobed, with a conical acute spur, whitish, with a

brown border and brown areas between the keels, and also some brown stripes on the side lobes. Front lobe cordate, oblong-elliptic, with a rough lobulate border, and 7–9 radiating whitish keels. Mouth of spur covered by two retrorse crests, with another crest in front. [*Arachnanthe Clarkei*, Rolfe; *B. M.* t. 7077; syn. *Esmeralda Clarkei*, Reichb. f.] Himalaya.

Vanda cœrulea grandiflora. (*R. H.* 1881, 290, t.) S. A large-flowered form.

Vanda cœrulescens Boxallii. (*G. C.* 1877, vii. 749.) S. A var. with white sep. and pet. and lavender-coloured lip with longitudinal blue stripes. India.

—— Var. **lowiana.** (*G. C.* 1877, viii. 102.) S. Like the var. *Boxallii*, but with an amethyst-coloured middle lobe to the lip and a dot of amethyst at each end of the sepals.

Vanda Dearei. (*G. C.* 1886, xxvi. 648; *Gfl.* 1887. 340.) S. Allied to *V. tricolor*, with yellow fl. L. very acute, bidentate at the apex, 1½ in. broad, yellowish green. Sep. and pet. shortly stalked, elliptic, obtuse. Lip with small squarish side lobes, and a broad transverse pandurate front lobe; spur conical and with a short rounded grooved crest over the front of its mouth. Sunda Isles.

Vanda denisoniana hebraica. (*G. C.* 1885, xxiv. 39.) S. A var. with sulphur-yellow sep. and pet. covered with numerous spots, bars and markings; spur orange inside; front part of lip light olive-green. Burma.

—— Var. **punctata.** (*G. C.* 1881, xv. 814.) S. A sulphur-coloured var. with the middle and base of the lip white and some brown spots on the pet. and odd sep.

Vanda hastifera. (*G. C.* 1884, xx. 556.) S. Fl. in a lax raceme; sep. and pet. undulate, spathulate, light yellow, blotched with yellow inside; lip with a conical compressed spur, semi-oblong triangular side lobes and hastate front lobe, covered with hair at its base, white, marked with brown and mauve. Sunda Islands.

Vanda hookeriana. (*Fl. and P.* 1882, 155; *W. O. A.* t. 73.) S. A fine species related to *V. teres*, which it resembles in habit. Fl. large, white, with lines of purple dots on the lip, which has a pair of triangular rich purple basal auricles; sepals cuneate-ovate, obtuse, wavy; petals large, broader than the sep., 2 in. across. Borneo.

Vanda insignis schrœderiana. (*G. C.* 1883, xx. 392.) S. A fine var. with light yellow sep. and pet., having light orange spots; lip cream-coloured.

Vanda kimballiana. (*G. C.* 1889, v. 233; vi. 294, 335, f. 50; *G. and F.* 1889, 499; *B. M.* t. 7112.) G. Allied to *V. amesiana*. The l. are subulate, dark green, about 9 in. long, as thick as a raven's quill. The spike is erect, about 1 ft. high, many-flowered; each flower 2½ in. across. pure white, with a rosy-purple lip. Burma.

—— Var. **Lackneræ.** (*Gfl.* 1894, 561; t. 1428.) G. A form differing from the type in the snow-white fl. with a number of light yellow spots at the mouth of the spur.

Vanda lamellata Boxallii. (*G. C.* 1880, xiii. 743; *W. O. A.* t. 338.) S. A fine var. with racemes bearing 14 to 24 ochre-coloured fl., with a purple base, blotched with mauve, particularly upon the lateral sep. Lip-blade purple-lake. Philippine Islands.

—— Var. **Boxallii superba.** (*L.* iii. t. 136.) S. A var. with the upper sep. and pet. white, spotted at the apex with claret colour; lateral sep. and lip for the greater part claret-coloured edged and flaked with white. [Syn. *V. superba*, Linden.]

Vanda Lindeni. (*G. C.* 1886, xxvi. 70; *L.* ii. t. 56.) S. Something in the way of *V. hastifera*, with a raceme of handsome fl. Sep. and pet. cuneate-oblong, wavy, light yellow, with red dots on the disk. Lip with nearly square side lobes, and a triangular mid-lobe going out into a sharp angle under two swellings at the apex, sulcate beneath, with a linear velvety ascending auricle on each side at the base, and three furrows over the disk; the colour is pale yellow, with purple spots on the swellings and side lobes and four purple lines on the disk, and at the tip under the tumours brownish. Spur conical, hairy inside. Sunda Isles.

Vanda Parishii mariottiana. (*G. C.* 1880, xiii. 743.) S. Var. with mauve-coloured fl. The sep. with darker mauve blotches. Auricles of lip white with mauve stripes; base with two yellow blotches; middle lobe deep lake. Burma.

Vanda Parishii purpurea. (*G. C.* 1883, xix. 307.) S. [*V. Parishii*, Reichb. f. var. *marriottiana*, Reichb. f.]

Vanda rœblingiana. (*K. B.* 1894, 365.) S. Allied to *V. limbata*. Stem 1 ft. high; l. linear-oblong, recurved, 6 in. long; peduncle bearing 2-6 fl. 2 in. across, brown and green, the lip white with purple and yellow streaks; the apex dilated into a pair of halbert-shaped lobes. Malaya.

Vanda Roxburghii rubra. (*Ill. H.* 1885, t. 579.) S. Var. with brown sep. and pet. tessellated with yellow, yellowish white outside; lip reddish.

—— Var. **wrightiana.** (*G. C.* 1883, xx. 262.) S. A var. of the purple-lipped form, with exceedingly short lips, and the side lobes with a few more or less developed anterior teeth.

Vanda sanderiana. (*G. C.* 1882, xvii. 588; *B. M.* t. 6983.) S. A handsome species with fl. 4–5 in. in diam. Sep. nearly circular; the odd one mauve with purple basal stripes; the laterals yellow washed with brown, with broad purple veins. Pet. smaller, coloured like the odd sep. Lip bluntly triangular, dark brown with green sides. Philippine Islands.

—— Var. **albata.** (*G. C.* 1887, ii. 9.) S. A var. with white upper sep. and pet. marked with a few purple spots at the base; lateral sep. with the middle and outer side suffused with pale yellow and veined and spotted with red; lip pale yellow, marked with brownish purple at the base, and brownish yellow at the base of the front lobe, which is sometimes striped with purple.

—— Var. **labello viridi.** (*L.* i. t. 4.) S. A distinct var. having a green lip.

Vanda stangeana. (*G. C.* 1885, xxiii. 406.) S. Infl. lax, of 4 or 5 fl. Sep. and pet. at first greenish, afterwards ochre-coloured, tessellated with dark purple-brown. Lip white and mauve-blue. Assam.

Vanda suavis Lindeni. (*L.* ii. t. 60.) S. A var. having the sep., pet. and base of the lip white with purple spots, and the rest of the lip purple.

Vanda superba. (*L.* iii. t. 136; *G. C.* 1888, iii. 806.) [*V. lamellata*, Lindl. var. *Boxallii superba*.]

Vanda teres alba. (*G. C.* 1892, xi. 664.) S. A var. with pure white fl.

—— Var. **aurorea.** (*G. C.* 1881, xv. 688.) S. Fl. white, with a reddish hue over the front part of the lip and some light yellow in the throat.

—— Var. **gigantea.** (*G. C.* 1896, xix. 593.) S. A large-flowered richly coloured form with stouter stems and l. than the type.

Vanda tricolor Hoveæ. (*L.* ix. t. 396.) S. A var. with yellowish sep., and pet. thickly spotted all over with red: the lip is rose-crimson.

—— Var. **Lewisii.** (*G. C.* 1894, xv. 494.) S. A var. with light-coloured fl. neatly spotted with red-brown.

—— Var. **Wallichii.** (*R. H.* 1893, 328, t.) S. A form with a yellow ground colour spotted with brown; lip lilac.

Vanda Vipani. (*G. C.* 1882, xviii. 134.) S. L. long and narrow. Sep. and pet. bluntly rhomboid, narrowed towards the base, white outside, inside pale at the base, with short brown-purple lines; the rest of the sep. olive-brown, and of the pet. almost ochre. They are striped with dark brown-purple. Side auricles of the lip yellow, and the middle lobe light olive-green. Burma.

Vanda vitellina. (*G. C.* 1892, xii. 206.) S. Resembling *V. cærulescens*, but the fl. are smaller and coloured egg-yellow.

Vanilla Humblotii. (*G. C.* 1885, xxiii. 726.) Orchidaceæ. S. A leafless species with very large fl. Sep. ligulate, acute. pet. rhombic, acuminate, broad; lip rhombic, blunt-angled, undulate in front, with a dark ribbon-like zone over the front part of the disk, and numerous twisted strong hairs scattered from base to disk. Comoro Islands.

Venidium fugax. (*G. C.* 1887, ii. 333.) Compositæ. H. annual, 1–1½ ft. high, clothed with short hairs. Radical l. stalked, elliptic, more or less sinuate or lobed; upper l. sessile, entire or slightly sinuate-toothed. Heads 1½ in. in diam., bright orange with a blackish disk. [Syn. *V. calendulaceum*, Hort.] South Africa.

Venidium hirsutum. (*G. C.* 1887, ii. 332.) H. Annual 1 ft. high, clothed with soft hairs. Radical l. lyrate-pinnatifid, stalked; upper l. sessile. oblong-lanceolate, pinnatifid. Fl.-heads $1\frac{1}{2}$–$1\frac{3}{4}$ in. in diam., bright orange-yellow with a blackish disk. [Syn. *V. speciosum*, Hort.] South Africa.

Veratrum Maacki. (*Gfl.* t. 1070.) Liliaceæ. H. Resembling *V. nigrum*, but with fewer l., the lower ones broadly lanceolate, acuminate, the upper narrower; panicle simple, elongate. Fl. blackish. Eastern Siberia.

Verbascum olympicum. (*Gfl.* t. 1078; *G. C.* 1885, xxiv. 19.) Scrophulariaceæ. H. Rosette of lanceolate acuminate woolly l. 2 $2\frac{1}{2}$ ft. long. Fl.-stem 5–6 ft. high, branched from near the base in a candelabrum-like manner. Fl. 1 $1\frac{1}{2}$ in. in diam., bright yellow. Levant.

Verbascum wiedemannianum. (*G. C.* 1893, xiv. 785.) H. A species with fl. changing from indigo-blue to purplish lilac. North Kurdistan.

Verbesina pinnatifida. (*Bruant Cat.* 1893, no. 216, 7, f.) Compositæ. G. Many feet high with large pinnatifid l. Guatemala.

Verminiaria denudata. (*H. G.* 1888, 272.) Leguminosæ. G. A misprint for *Viminaria denudata*.

Vernonia podocoma. (*B. M.* t. 7255.) Compositæ. G. A tall-growing plant with large leathery foliage and a terminal panicle, which on strong plants is 3 ft. long, and nearly as much wide. The fl. are $\frac{1}{2}$ in. long, tubular, and rose-purple, arranged in loose heads. South Africa.

Veronica amplexicaulis. (*G. M.* 1895, 87; *B. M.* t. 7370.) Scrophulariaceæ. H. A dwarf shrubby plant, with imbricating elliptic l. and spikes of white fl. New Zealand.

Veronica carnosula. (*B. M.* t. 6587.) The plant figured under this name is not the true *V. carnosula*, but the well-known *V. pinguifolia*.

Veronica Colensoi. (*G. M.* 1893, 269; *B. M.* t. 7296.) H. H. shr. closely allied to *V. Traversii* and bearing a profusion of small trusses of lavender-blue fl. New Zealand.

Veronica cupressoides variabilis. (*G. C.* 1888, iii. 20, f. 5, 7.) [Syn. *V. salicornioides*, Hort. not of Hook. f.] H. New Zealand.

Veronica Fairfieldii. (*B. M.* t. 7323.) H. H. species or possibly a natural hybrid closely related to *V. hulkeana*. It has short branches, ovate toothed l. less than 1 in. long, green with a brownish margin; fl. lavender-coloured, on short erect branched racemes. New Zealand.

Veronica godefroyana. (*R. H.* 1888, 455; *Jard.* 1888, 249; *W. G.* 1888, 470.) H. H. evergreen shr., forming a spherical bush $1\frac{1}{2}$–3 ft. high. L. $\frac{1}{2}$ in. long, $\frac{1}{4}$ in. broad, oblong, obtuse, narrowed at the base, thick in texture, concave, glaucous green. Fl. in axillary compact racemes, small, very numerous, white. [This is probably *V. carnosula*, Hook. f.] New Zealand.

Veronica Hectori. (*G. C.* 1895, xvii. 590; *B. M.* t. 7415.) H. H. An erect undershrub, with small imbricate l. and clusters of pale lilac fl. New Zealand.

Veronica loganioides. (*Gard.* 1893, xliv. 436; *B. M.* t. 7404.) H. H. A dwarf species belonging to the Conifer-like section. The plant is yellowish-green in colour bearing racemes of white fl. New Zealand.

Veronica longifolia subsessilis. (*B. M.* t. 6407.) H. A fine var. differing from the type in its sparser pubescence, broader larger l. with much shorter petioles, and in its large dense spike of bright blue fl. Japan.

Veronica Lyallii. (*B. M.* t. 6456.) H. A dwarf species, with slender prostrate or ascending stems, opposite ovate acute serrate l., and lax racemes of long-pedicelled fl. Corolla $\frac{1}{3}$ in. in diam., white, tinged with lilac. New Zealand.

Veronica monticola. (*G. C.* 1892, xii. 614.) H. A perennial trailing species with spreading tufts of oblong-lanceolate glabrous l., and spikes of small blue fl. Abkhasia, Transcaucasia.

Veronica satureioides. (*Gfl.* t. 1192, f. 3.) H. A small dwarf species with obovate toothed or entire l., and short terminal racemes of bright blue fl. Dalmatia.

Veronica speciosa imperialis. (*Fl. des S.* t. 2317.) G. shr. A garden variety with large dense spikes of purple fl.

Viburnum dilatatum. (*B. M.* t. 6215.) Caprifoliaceæ. H. shrub with l. 2-5 in. long, roundish or roundish-ovate, obtusely pointed, serrate, pubescent. Fl. white, in large terminal corymbs; corolla rotate. $\frac{1}{3}$ in. broad. Japan.

Viburnum Lentago subpedunculatum. (*Gfl.* 1889, 462.) H. A var. with short peduncles, about $\frac{3}{8}$ in. long.

Viburnum pauciflorum. (*G. and F.* 1890, 4, f. 1.) H. A deciduous shrub which may be described as a dwarf *V. Opulus*. Eastern United States.

Viburnum stellatum. (*Späth Cat.* 1889–90, 3.) H. shr. with thick rugose strongly veined oblong-ovate l., about 6 in. long and 3½ in. broad. [Perhaps not *V. stellatum*, Hemsl.] Mexico.

Viburnum Vetteri. (*Gfl.* 1889, 462.) H. A garden hybrid between *V. Lentago* and *V. nudum*.

Vicia dennesiana. (*B. M.* t. 6967.) Leguminosæ. H. H. per. climber, of great interest, on account of its being extinct in a wild state. L. pinnate, ending in branched tendrils. Racemes rather dense. Buds purple, changing to slaty-blue, and on expansion to a dingy fawn colour. Azores.

Vigna strobilophora. (*G. and F.* 1894, 153, f. 30.) Leguminosæ. G. A climber with woody stems, pinnately trifoliate l. and *Wisteria*-like purple and white fl. Mexico.

Villanova chrysanthemoides. (*B. M.* t. 6422.) Compositæ. H. annual, free-flowering, erect, branching, leafy. L. biternately pinnatifid, alternate. Fl.-heads yellow, radiate, 1 in. in diam., corymbose. Colorado; New Mexico.

Villarsia capitata. (*B. M.* t. 6420.) Gentianaceæ. H. H. or G. marsh herb, 2–3 in. high. L. 2–3 on each stem, small, cordate-orbicular, sinuate-toothed, on long petioles. Fl. terminal, capitate, ½ in. in diam., light yellow; pet. bifid and denticulate. West Australia.

Viola beckiana. (*W. G.* 1896, 197, t. ii.) Violaceæ. H. A handsome rock plant with large blue or yellow fl. Bosnia.

Viola calcarata albiflora. (*Gfl.* t. 1028.) H. A var. with large white flowers.

—— Var. **Halleri.** (*Gfl.* t. 1028.) A form with large dark blue flowers.

Viola declinata. (*G. C.* 1892, xi. 650; *Gard.* 1892, xli. 451.) H. Height 6 in. Fl. large, deep bright purple, with darker markings near the yellow eye. L. ovate, bluntly toothed. Transylvania.

Viola pedata atropurpurea. (*Gfl.* t. 1110, f. a.) H. A pretty var. with the three lower pet. white, and the two upper ones violet. North America.

Vitex Lindeni. (*B. M.* t. 6230.) Verbenaceæ. G. shrub, with spreading branches; branchlets and inflorescence covered with a very fine hoary pubescence. L. opposite, digitately 3–5-foliolate, on slender petioles; leaflets sessile, elliptic or elliptic-obovate, abruptly acuminate, pale green, glabrous. Fl. in 3 6-flowered pedunculate axillary cymes, shortly pedicelled or sessile; corolla-tube 3 times as long as the calyx; limb flat, 2-lipped; upper lip of two smaller, lower lip of three larger rounded lobes, pale lilac, streaked with red inside the tube. Colombia.

Vitex trifolia variegata. (*Bull Cat.* 1876, 11.) G. shrub of slender habit, with downy branches. L. opposite, white-margined. Fl. violet-purple. South Sea Islands.

Vitis acuminata. (*R. H.* 1890, 183; *W. G.* 1890, 298.) Ampelidaceæ. H. Vine with narrow ovate entire l., rounded or slightly cordate at the base, gradually attenuate to a sharp point, scarcely toothed on the margin, glabrous above, with a very short glaucous-white pubescence beneath. Fr. large, black, in long narrow bunches. Eastern Asia.

Vitis argyrophylla. (*R. H.* 1892, 222.) H. An error for *V. ægirophylla*. H. Vine with very variable l., unequally and very sharply toothed. Turkestan.

Vitis Berlandieri. (*B. T. O.* 1888, 156.) H. Stems pentagonal, covered with a crisp floccose pubescence;

l. cordate-orbicular, more or less 3-lobed, toothed; panicles bearing blackish violet globose berries. Texas; New Mexico.

Vitis capensis. (*R. H.* 1887, 372, t.) G. A trailing species, with reniform obtusely angled and sinuate-toothed l., and short cymes of tomentose fl., followed by depressed-globose blackish red berries. South Africa.

Vitis Coignetiæ. (*G. and F.* 1893, 450; *G. C.* 1897, xxii. 305, f.) H. Introduced into France and America a few years ago from Japan, and at first mistaken for *V. Labrusca* which it resembles in habit and foliage. It is remarkable for the rich crimson colour assumed by its l. in autumn. Japan.

Vitis doaniana. (*G. and F.* 1896, 454, f. 59.) H. A very hardy vine with hoary white l. and branches. Texas.

Vitis indivisa. (*G. and F.* 1888, 297.) H. L. cordate, serrate, 4–5 in. long. Fl. in small loose panicles. Berries about the size of a pea. Eastern North America.

Vitis japonica crassifolia. (*R. H.* 1886, 81.) H. A var. with large very thick coriaceous 3-lobed l. bright green above, cobwebby-tomentose beneath.

Vitis multifida gracilis. (*R. H.* 1891, 206.) H. Vine of much branched habit, with very slender stems, and deeply lobed l. Grapes black, in small bunches. China.

Vitis pterophora. (*B. M.* t. 6803.) S. The stems are square with frilled angles, and the l. large and trifoliolate. [Syn. *V. gongylodes*, Baker.] Brazil.

Vitis reniformis violacea. (*R. H.* 1888, 536, f. 132.) H. dioecious Vine. with very long slender stems. L. large, roundish-reniform, obtuse, crenulate, dark green above, paler beneath, strongly reticulate, the petiole and veins cottony-hairy. Male fl. in small panicles, on slender dark red peduncles. China.

Vitis Romaneti. (*R. H.* 1888, 536, 131.) H. dioecious Vine. L. very variable, cordate-entire to 5-lobed, acute, toothed, bright green above, silvery white beneath. Male flowers in freely produced compact panicles. China.

Vitis obtusifolia. (*R. H.* 1891, 522 f. 136.) H. L. cordate, nearly entire, covered with a white tomentum.

—— Var. **serotina.** (*R. H.* 1891, 520, f. 134.) H. Apparently only a form of the female plant which ripens fruit late.

Vitis rutilans. (*R. H.* 1890, 444, t.) H. With the stems and petioles densely clothed with setæ of a brilliant dark red colour; l. broadly cordate, acute, serrate, glaucous beneath. Eastern Asia.

Vitis Solonis robusta. (*W. G.* 1896, 34.) H. A garden hybrid between *V. Solonis* and *V. riparia*.

Vitis striata. (*G. C.* 1881, xvi. 427.) H. H. Evergreen climber, with rather thick digitate l. having sessile cuneate-oblanceolate serrate leaflets, and cymes of greenish fl. Berries as large as a pea, reddish. Also called *V. sempervirens*. South Brazil; Uruguay.

Vriesia Alberti. (*R. H.* 1889, 300, f. 73, t.) Bromeliaceæ. S. A garden hybrid between *V. incurvata* and *V. morreniana*. [*Tillandsia.*]

Vriesia amethystina. (*B. H.* 1884, 330, t. 15–16; *R. H.* 1885, 261.) S. species, with a rosette of broad linear acuminate l., 12–16 in. long, shining green above, purplish beneath; fl.-stem 1½ ft. high, with a simple lax spike of yellow fl., 2½ in. long; bracts greenish yellow, 1 in. long. [*Tillandsia amethystina*, Baker; *B. M.* t. 7121.] Brazil.

Vriesia andreana. (*Ill. H.* 1895, 217.) S. A garden hybrid between *V. Barilleti* and *V. splendens major*. [*Tillandsia.*]

Vriesia Aurora. (*B. H. B.* 1894, 28.) S. A garden hybrid between *V. morreniana* and *V. Warmingi*. [*Tillandsia.*]

—— Var. **major.** (*R. H. B.* 1894, 28.) S. A garden hybrid between *V. Warmingi* and *V. psittacina*.

Vriesia Barilleti. (*B. H.* 1883, 33, t. 3; *R. H.* 1883, 394.) S. A peculiar plant, with green smooth-edged l., 16–20 in. long, shortly acuminate, with the margins rolled in at the middle. Scape about as long as the l. with red-brown sheaths; spike elongate, distichous, dense; bracts boat-shaped,

conduplicate, yellowish olive, with red-brown dots ; fl. solitary in each bract, yellow. [*Tillandsia Barilleti*, Baker.] Ecuador.

Vriesia bellula. (*Lind. Cat.* 1883, 7.) S. A beautiful species with a small rosette of purplish l. with metallic reflections, and a short reddish brown fl.-stem with parti-coloured carmine and white bracts, and small white fl. [*Tillandsia heliconioides*, H. B. & K.] Brazil.

Vriesia cardinalis. (*Ill. H.* 1891, t. 125.) S. A garden hybrid between *V. brachystachys* and *V. Krameri*. [*Tillandsia.*]

Vriesia chrysostachys. (*B. H.* 1881. 87.) S. L. numerous, coriaceous, lorate, arched, dark green, about 1 ft. long, forming a lax rosette. Fl.-stem about 1 ft. long, clothed with greenish bracts. Fl.-spike simple, elliptic. Bracts distichous, yellow. Fl. yellow, concealed by the bracts. [*Tillandsia chrysostachys*, Baker ; *B. M.* t. 6906.] Peru.

Vriesia Closoni. (*R. H. B.* 1894, 28.) S. A garden hybrid between *V. Barilleti* and *V. morreniana*. [*Tillandsia.*]

Vriesia crousseana. (*R. H. B.* 1894, 28.) S. A garden hybrid between *V. amethystina* and *V. Warmingi*.

Vriesia duvaliana. (*B. H.* 1884, 105, t. 7–8 ; *R. H.* 1885, 559.) S. In the way of *V. brachystachys*, with a rosette of short spreading lanceolate l., green above, tinged with red beneath. Fl.-stem about 1 ft. high, bearing a simple lanceolate spike with distichous scarlet bracts, tipped with green. Fl. yellow, tipped with green. [*Tillandsia duvaliana*, Baker.] Brazil.

Vriesia elmireana. (*Ill. H.* 1895, 217.) S. A garden hybrid between *V. cardinalis* and *V. splendens*. [*Tillandsia.*]

Vriesia fulgida. (*Ill. H.* 1888, t. 67.) S. Garden hybrid. [*Tillandsia.*]

Vriesia gracilis. (*R. H. B.* 1894, 28.) S. A garden hybrid between *V. Warmingi* and *V. amethystina*. [*Tillandsia.*]

Vriesia gracilis. (*Gfl.* 1886, 161, 163, f. 11.) S. A slender species, with a lax rosette of green l. 10–12 in. long by 2½ in. broad, and a slender panicle about 2½ ft. high, with distant distichous inconspicuous fl. subtended by spreading reddish bracts with green tips. [*Tillandsia procera*, Mart.] Brazil.

Vriesia gravisiana. (*R. H. B.* 1890, 49, t. ; *Gfl.* 1890, 494, f. 81.) S. A garden hybrid between *V. psittacina morreniana* and *V. Barilleti*. [*Tillandsia.*]

Vriesia heliconioides. (*G. C.* 1884, xxi. 140, f. 26.) S. Of dwarf tufted habit, with recurving ligulate lanceolate l., green above, violet below. Spike erect, simple, rising 4–5 in. above the l., with 2 rows of boat-shaped acute bracts of a brilliant rose-pink with green tips. Fl. tubular, curved, white. [*Tillandsia heliconioides*, H. B. & K.] Colombia.

Vriesia Henrici. (*Ill. H.* 1895, 217.) S. A garden hybrid between *V. splendida* and *V. splendens*. [*Tillandsia.*]

Vriesia hieroglyphica. (*Ill. H.* 1884, t. 514 ; *Fl. and P.* 1884, 94.) S. Syn. *Massangea hieroglyphica* and *Tillandsia tigrina*. [*Tillandsia hieroglyphica*, Baker.]

Vriesia hybrida petersiana. (*Gfl.* 1895, 456, f. 92.) S. A garden hybrid between *V. guttata* and *V. Barilleti*. [*Tillandsia.*]

—— Var. **Pommer-Escheana.** (*Gfl.* t. 1388.) S. A garden hybrid between *V. morreniana* and *V. splendens*. [*Tillandsia.*]

Vriesia imperialis. (*R. H.* 1888, 58.) S. A Bromeliad, with a very stout stem, about 18–20 in. thick, bearing a rosette 1½ ft. in diam., of bright green l., which are ascending and slightly recurved, channelled down the face, narrowed gradually from the base to the spine-pointed apex. Fl. unknown. [One of the many forms of *Tillandsia Regina*, Vell.] Brazil.

Vriesia incurvata. (*B. H.* 1882, 52, t. 2.) S. A pretty species with broad-based lorate shortly acuminate green l., and a stout distichous dense spike with orange-red conduplicate keeled bracts and yellow green-tipped fl. [*Tillandsia incurvata*, Baker.] Brazil.

Vriesia insignis. (*Gfl.* 1891. 476.) S. A garden hybrid between *V. Barilleti* and *V. splendens*. [*Tillandsia.*]

Vriesia kitteliana. (*Gfl.* 1890, 326, f. 62, 63.) S. A garden hybrid between *V. Barilleti* and *V. Saundersii*. [*Tillandsia.*]

Vriesia Krameri. (*B. H.* 1884, 369.) S. A form of *Tillandsia psittacina*, (*B. M.* t. 2841), with entirely red bracts. Brazil.

Vriesia leodiensis. (*W. G.* 1890, 154.) S. A garden hybrid between *V. psittacina morreniana* and *V. Barilleti*. [*Tillandsia.*]

Vriesia magnisiana. (*Gfl.* 1889, 343, f. 56–8.) S. A garden hybrid between *V. Barilleti* and *V. fenestralis*. [*Tillandsia.*]

Vriesia Mariæ. (*R. H.* 1889, 300, f. 74, t.) S. A garden hybrid between *V. Barilleti* and *V. brachystachys*. [*Tillandsia.*]

Vriesia mirabilis. (*Jard.* 1896, 199.) S. A garden hybrid between *V. hieroglyphica* and *V. cardinalis*. [*Tillandsia.*]

Vriesia morreno-barilletiana. (*Ill. H.* 1889, t. 91.) S. A garden hybrid between *V. Barilleti* and *V. psittacina morreniana*. [*Tillandsia.*]

Vriesia Mortierii. (*R. H.* 1896, 219.) S. A garden hybrid between *Encholirion roseum* and *Vriesia incurvata*. [*Tillandsia.*]

Vriesia obliqua. (*Gfl.* t. 1369.) S. A garden hybrid, parents doubtful.

Vriesia Pœlmani. (*R. H. B.* 1896, 229, t.) S. A garden hybrid between *V. splendens* and *V. Van-Geerti*. [*Tillandsia.*]

Vriesia psittacina morreniana. (*B. H.* 1882, 287, t. 10–12, f. 2, by error numbered 3; *Fl. and P.* 1883, 11.) S. A handsome var. having more numerous and more approximate fl. [*Tillandsia psittacina*, Baker.] Brazil.

Vriesia pulverulenta lineata. (*R. H.* 1888, 89, f. 20.) S. Rosette of l. measuring 6–7 ft. in diam. L. ascending with recurved tips, gradually narrowing from a very broad base to the acute apex, green, with mealy hairs, and longitudinally striped with yellow. **Fl. unknown.** [*Tillandsia.*] **Brazil.**

Vriesia purpurascens. (*G. C.* 1893, xiii. 413.) S. A richly coloured plant; l. dark green flushed with purple, wholly purple on the under side. [*Tillandsia.*] Brazil.

Vriesia retroflexa. (*B. H.* 1884, 185, t. 10.) S. A garden hybrid between *V. scalaris* and *V. psittacina morreniana*. [*Tillandsia.*]

Vriesia Rex. (*R. H. B.* 1894, 217, t.) S. A garden hybrid between *V. morreno-barilletiana* and *V. cardinalis*. [*Tillandsia.*]

Vriesia rodigasiana. (*Ill. H.* 1882, t. 467; *Fl. and P.* 1883, 11; *Lind. Cat.* 1883, 7.) S. A. Bromeliad of moderate size with a tuft of ligulate green l., 7–8 in. long, 2 in. broad, and a lax panicle of yellow fl., the larger bracts rosy. [*Tillandsia rodigasiana*, Baker.] South Brazil.

Vriesia scalaris. (*B. H.* 1879, 301.) S. L. ligulate, ciliate, about 10 in. long, green. Fl.-stem 1½–2 ft. long, hanging from the plant like a rope ladder. The fl. are very long; bracts deep rose; calyx yellow; corolla green. [*Tillandsia scalaris*, Baker.] Brazil.

Vriesia tessellata parisiensis. (*Ill. H.* 1895, 189.) S. A fine var. [*Tillandsia.*] South Brazil.

—— Var. **roseo-picta.** (*R. H.* 1884, 374.) S. L. marked with large rosy spots.

—— Var. **Sanderæ.** (*G. C.* 1893, xiii. 442.) S. A. var. with l. variegated in white and yellow bands on a green tessellated ground. South Brazil.

—— Var. **sanderiana.** (*G. C.* 1892, xi. 731.) S. A var. with the l. more distinctly zoned and marbled than the type.

Vriesia versaliensis. (*Ill. H.* 1889, 73, t. 87.) S. A handsome garden hybrid between *V. psittacina duvaliana* and *V. brachystachys*. [*Tillandsia.*]

Vriesia viminalis. (*B. H.* 1878, 257, t. 14, 15.) S. L. in a large open rosette, recurving, ligulate, acute, entire, 1 ft. long, 1¼–2 in. broad. Scape 2 ft. long, covered with scarious bracts. Spike simple, distichous, dense. Fl. white, 1½ in. long, ½ in. in diam. Pet. oblong, obtuse. [*Tillandsia viminalis*, Hemsl.] Costa Rica.

Vriesia Warmingii. (*B. H.* 1884, 260, t. 12–13.) S. A grand species with coriaceous slightly spreading acute l., about 3 ft. long and 2 in. broad, green, marbled and finely striate with dark rose, especially in the lower part and towards the point. Fl.-stem 3 4 ft. high. with a long simple spike. Bracts yellow, tipped with green. Fl. yellow. [*Tillandsia Warmingii*, Baker.] Brazil.

Vriesia weyringeriana. (*Gfl.* 1890, 7, f. 1.) S. A garden hybrid between *V. Barilleti* and *V. scalaris*. [*Tillandsia.*]

Vriesia Wioti. (*R. H. B.* 1894, 28.) S. A garden hybrid between *V. psittacina* and *C. Barilleti*. [*Tillandsia.*]

Vriesia wittmackiana. (*Gfl.* t. 1283; *G. C.* 1888, iv. 565.) S. Garden hybrid. [*Tillandsia.*]

Wahlenbergia saxicola. (*B. M.* t. 6613.) Campanulaceæ. H. L. oblanceolate, toothed, 1 in. long; scapes slender, 4–6 in. high, bearing solitary campanulate blue fl. 1 in. in diam. New Zealand.

Wahlenbergía tenuifolia. (*B. M.* t. 6482.) H. per. of dwarf tufted habit, with heads of campanulate violet-blue fl., surrounded by an involucre of linear bracts with orbicular bases; l. linear 1½–4 in. long. [Syn. *Edraianthus tenuifolius*, A. DC.] Dalmatia, &c.

Wahlenbergia undulata. (*B. M.* t. 7174.) G. A straggling herbaceous plant with thin stems, linear oblong l. and terminal campanulate fl. 1 in. deep and wide, violet-blue. South Africa.

Waluewa pulchella. (*Acta Hort. Petrop.* 1890, xi. 309; *Gfl.* t. 1341.) Orchidaceæ. S. A genus allied to *Gomesa*. A small tufted plant, with compressed oblong or sub-linear bulbs 2–2½ in. long, bearing one lanceolate acute l. 2½ in. long. Racemes basal, 6 8-flowered, recurved. Fl. about ½ in. long, yellowish, with a purple band on the pet., and purple spots on the lip. Brazil.

Warrea bidentata. (*G. C.* 1888, iii. 104; *Paxton's Flower Garden*, i. 73, f. 47.) Orchidaceæ. S. Allied to *W. tricolor*, but with a longer and narrower lip, having a sharp basal keel, and the disk covered with seriate callosities. [*Aganisia.*]

Warrea cyanea alba. (*G. C.* 1885, xxiii. 692.) S. A striking var. with a pure white lip. [*Aganisia cyanea*, Benth. and Hook. f. var.]

Washingtonia robusta. (*R. H.* 1885, 401, 403, f. 73.) Palmæ. S. The l. are large and fan-shaped, cut to about half-way down into numerous linear segments, edged with white threads, which are recurved so as to form a sort of crown at the acute angles between the segments; the petiole is spiny. [*W. filifera*, H. Wendl.] California.

Watsonia densiflora. (*B. M.* t. 6400.) Iridaceæ. G. A fine well marked species. L. erect, linear, rigid, 18 24 in. long, ½ in. broad, with several strong ribs and a thickened straw-coloured margin. Scape as long as the l., covered by numerous reduced l. Spike dense, distichous. Fl. rose-red with a tube 1½ in. long, and spreading lanceolate acute segments ½–¾ in. long. Style trifid, with each segment again bifid. Natal.

Watsonia iridifolia Ardernei. (*G. and F.* 1896, 404.) G. A white-flowered subvariety of *W. Meriana*, identical with *W. iridifolia O'Brieni.*

—— Var. **O'Brieni.** (*G. C.* 1889, vi. 334, 350; *R. H.* 1889, 541.) G. Similar to *W. rosea* in general appearance, but with pure white fl. [*W. Meriana*, Mill. var. *O'Brieni.*] South Africa.

Weigela candida. (*R. H.* 1879. 130.) Caprifoliaceæ. H. shr., of vigorous habit. L. large, elliptic, cuspidate, dentate. Fl. in terminal bunches on short lateral shoots, very abundant, white. [*Diervilla.*]

Weigela procumbens. (*R. H.* 1879, 60.) H. shr. A var. with slender trailing branches and rose-coloured fl. more or less spotted with white.

Weldenia candida. (*K. B.* 1894, 135; *B. M.* t. 7405.) Commelinaceæ. G. Root a fleshy tuber, bearing annually 6–8 strap-shaped l. with folding bases; fl. 1 in. in diam., snow white, single on erect scapes in a cluster in the centre of the l. Mexico; Guatemala.

Wellingtonia pyramidata compacta. (*R. H.* 1891, 166.) Coniferæ. H. A garden var. of compact pyramidal growth. [*Sequoia gigantea*, Torr. var.]

Westringia longifolia. (*Gfl.* t. 937, f. b.) Labiatæ. G. shr., in the way of *W. eremicola*, from which it may be known by its green foliage (not canescent-hairy as in that species). L. 3 in a whorl, linear. Fl. sub-sessile, axillary. very pale lilac. Australia.

Widdringtonia Whytei. (*G. C.* 1894, xv. 746.) Coniferæ. G. The Milanji Cypress which grows in the mountains of Nyasaland to a height of 140 ft. It has Juniper-like l. and cones smaller than a chestnut.

Wistaria chinensis variegata. (*Williams' Cat.* 1886, 26.) Leguminosæ. H. A var. with bright silvery variegated foliage.

Wittsteinia vacciniacea. (*K. B.* 1893, 112.) Ericaceæ. G. One of the very few representatives of the *Ericaceæ* in Australia. It is a sub-alpine plant with prostrate creeping stems and ascending branches 1 ft. long, clothed with small thick roundish toothed l. and small axillary yellowish or red campanulate fl. Australia.

Woodsia scopulina. (*G. C.* 1883, xviii. 616; *Fl. and P.* 1882, 181.) Filices. H. fern of dwarf habit, with short creeping scaly rhizomes, and oblong-lanceolate pinnate fronds, 6–10 in. long; pinnæ numerous, 8–15 lines long, deeply pinnatifid. Rocky Mountains.

Woodwardia radicans cristata. (*Fl. and P.* 1878, 21.) Filices. G. A var. with regularly and symmetrically crested pinnæ.

Wormia Burbidgei. (*B. M.* t. 6531.) Dilleniaceæ. S. A handsome evergreen shr. with large bold elliptic almost entire deep green l., 8–10 in. long, and axillary few-flowered cymes of large golden fl. 4–5 in. across. Borneo.

Xanthisma texanum. (*B. M.* t. 6275.) Compositæ. H. annual, with showy yellow fl. Stem slender, sparingly branched, 1–3 ft. high. L. alternate, 1 in. or more long, sessile, linear, linear-oblong or slightly dilated upwards, acute, with a deciduous bristle, entire or serrated above; margin fringed with minute cartilaginous teeth. Fl.-heads solitary, 1–1½ in. in diam., radiate, bright yellow. Texas.

Xanthorrhœa minor. (*B. M.* t. 6297.) Juncaceæ. G. evergreen. Stemless per. of grass-like habit. L. 8–10 in. long, suberect, filiform, triangular, flat or slightly concave or convex above: margins rough. Scape shorter than the l., terminating in a spike 2–3 in. long or longer, bearing dense spirals of fl. Sep. linear, dilated above, obtuse, concave, hard, green with brown pubescent tips. Pet. longer, thinner, flatter and broader, whitish. Stamens exserted, horizontally bent above the corolla, white. Australia.

Xanthorrhœa Preissii. (*B. M.* t. 6933.) G. One of the remarkable "Grass-trees," with a stout trunk, long quadrangular slender l., and a fl.-stem 1–8 ft. long, bearing a dense spike of about the same length, of greenish yellow fl. South-west Australia.

Xanthosoma Barilleti. (*R. H.* 1882, 259, f. 58.) Araceæ. S. per. foliage plant of bold habit, with large pedate dull green l. Brazil.

Xeronema Moorei. (*Ill. H.* 1877, t. 297; *Lind. Cat.* 1878, 5; *G. C.* 1878, x. 8, f. 3.) Liliaceæ. S. per. with distichous ensiform acute l., like those of an *Iris*, 12–16 in. long. Scape about 20 in. long, bracteate, abruptly bent in a horizontal manner a little below the raceme of bright crimson fl., which stand erect on the upper side; perianth campanulate, ¾ in. long; segments narrow, linear-lanceolate, acute; stamens exserted, twice as long as the corolla. New Caledonia.

Xerophyta retinervis. (*Gfl.* t. 903; *G. C.* 1876, vi. 836, f. 153.) Amaryllidaceæ. G. A remarkable plant, with a trunk growing to a height of 12 ft., crowned with a tuft of long linear recurved rigid glabrous l. Scapes dark-coloured above, with a few bristles below the oblong ovary, which is densely clothed with ascending brown bristles. Fl. blue, 1½ in. in diam.; the segments 15–18 lines long, 3–4 lines broad, naked outside. Anthers nearly sessile, ½ in. long. [*Vellozia retinervis*, Baker.] Natal; Transvaal.

Xiphion planifolium. (*B. M.* t. 6352.) Iridaceæ. H. H. Bulbous rootstock producing 4–6 broad flat linear l. about 6 in. long, and 1 sessile long-tubed fl.: perianth pale lilac with some darker spots and a keel of yellow down the face of the outer

segments, not bearded : inner segments about 1 in. long, spathulate, unguiculate, spreading from between the outer segments ; crests of stigmas nearly as large as the outer perianth-segments, pale lilac. [*Iris alata*, Poir.] Algeria ; South Europe.

Xylobium Colleyi. (*G. C.* 1890, vii. 288.) Orchidaceæ. S. Pseudobulbs round ; l. large, *Stanhopea*-like. Fl. on short scapes, reddish brown with purple spots, with an odour like that of a cucumber. [Syn. *Maxillaria Colleyi*, Lindl.] Trinidad.

Xylobium corrugatum. (*G. C.* 1889, v. 458.) [Syn. *Maxillaria corrugata*, Lindl.]

Xylobium leontoglossum. (*G. C.* 1889, v. 458 ; *B. M.* t. 7085.) [Syn. *Maxillaria leontoglossa*, Reichb. f.]

Yucca elata. (*G. and F.* 1889, 568, f. 146.) Liliaceæ. G. An arborescent species with a trunk 3 12 ft. high by 10 in. in diam. ; l. linear, breaking into filaments on the margins ; scape stout, erect, branching, 7 10 ft. high, bearing numerous white fragrant fl., each 3 4 in. in diam. Mexico.

Yucca filamentosa aureo-variegata. (*Veitch Cat.* 1884, 16.) G. L. marked with bright yellow longitudinal bands.

Yucca gloriosa medio-striata. (*Fl. des S.* t. 2393 4.) H. A var. with a broad whitish green band down the centre of the l. on both sides.

—— Var. **recurvifolia, foliis variegatis.** (*Ill. H.* 1883, t. 475 ; *Fl. and P.* 1883, 27.) H. var. with a pale green reddish-tinted stripe down the centre of the l.

Yucca Hanburyi. (*K. B.* 1892, 8.) H. H. Allied to *Y. angustifolia*. Acaulescent. L. in a dense rosette, linear, rigid, green, with a pale brown edge and a few marginal filaments. Raceme simple, 1½ ft. long ; fl. campanulate, 2 in. long, white.

Yucca orchioides major. (*B. M.* t. 6316.) H. Differing from the type in its more robust habit, branched infl., longer styles, longer and more acute petals. Southern United States.

Yucca Whipplei violacea. (*R. H.* 1884, 324, t. ; *Fl. and P.* 1884, 138.) G. Fl. violet-tinted. Arizona, &c.

Zalacca nitida. (*Bull Cat.* 1886, 9.) Palmæ. S. A fine Palm with a spiny trunk and dark green pinnate l. In the young plant the l. are two-parted. West Africa.

Zamia amplifolia. (*G. C.* 1878, x. 810.) Cycadaceæ. S. evergreen : caudex oblong, obtuse, glabrous. L. erect : petiole 15 16 in. long, purplish, terete, puberulous, with scattered minute prickles ; blade 4½ in. long, pinnatisect, with two pairs of broadly ovate-lanceolate acuminate glabrous entire yellowish-green segments, 11 in. long, 3–4 in. broad, strongly ribbed on both sides ; rhachis angular. Colombia.

Zamia montana. (*G. C.* 1882, xvii. 460 ; *Fl. and P.* 1882, 76.) S. Cycad with a trunk 4 5 ft. high and ¾ ft. thick, and a terminal tuft of pinnate l. 4 5 ft. long. Petiole with a dusky tomentum at the base, and beset throughout with scattered prickles. Leaflets 8–10 pairs, 1 ft. or more long, 2–4 in. broad, oblanceolate to linear-oblanceolate, abruptly acuminate, with one prominent and a few obscure teeth. Colombia.

Zamia noeffiana. (*Lind. Cat.* 1896, 23.) S. Allied to *Z. Lindeni*, with large fronds, the pinnæ also large and with marginal teeth. South America.

Zamia obliqua. (*Ill. H.* 1877, t. 289 ; *B. M.* t. 7542.) S. With a slender trunk growing to a height of 6 or 7 ft. L. unarmed, glabrous, or covered with a close pubescence, pinnate ; leaflets 7–10 on each side of rhachis, ovate-lanceolate, acuminately obtuse at the apex, attenuate at the base, about 8 in. long, and nearly 3 in. broad. Colombia.

Zamia prasina. (*Bull Cat.* 1881, 20.) S. L. pinnate ; leaflets in 16–17 pairs, oblanceolate-cuneate, denticulate towards the apex, bright grass-green above. Petiole terete, with a slight furrow in front, and beset with a few white prickles. [*Z. latifolia*, Lodd.] Honduras.

Zamia Lieboldi angustifolia. (*Ill.* t. 929.) S. A var. with narrower leaflets than in the type. Cuba.

Zamia tonkinensis. (*Ill. H.* 1885, t. 547; *Cat. Comp. Cont. d'Hort.* 1885, 10, f.; *G. C.* 1885, xxiii. 694.) S. The plant described under this name as above is not a *Zamia*, but a species of *Cycas*, somewhat like *C. circinalis*, with a dwarf trunk, surmounted by a crown of large plume-like pinnate l., with spiny petioles. Tongking.

Zea gracillima variegata. (*Gfl.* 1886, 640.) Gramineæ. H. H. A garden var. of *Z. Mays*.

Zea tunicata, foliis variegatis. (*W. G.* 1891, 457.) H. H. annual. A garden var. of *Z. Mays* with variegated leaves.

Zelkova japonica Verschaffelti. (*G. C.* 1892, xii. 669.) Urticaceæ. H. A small tree with conspicuously toothed l.; also known as *Ulmus Verschaffelti*. [*Z. Verschaffelti*, Dippel.] Eastern Asia.

Zephyranthes citrina. (*B.M.* t. 6605.) Amaryllidaceæ. G. With 2–3 long linear l., and a scape 4–5 in. long, bearing a solitary erect bright yellow fl. 1½ in. long. Demerara?

Zephyranthes macrosiphon. (*G. C.* 1881, xvi. 70.) G. bulb, in the way of *Z. carinata*, having a large bright pink fl. with a tube as long as the segments; style with short stigmatic lobes. Mexico.

Zephyranthes taubertiana. (*Gfl.* t. 1427.) G. A species with narrow linear l. and large pink-tinted fl. Brazil.

Zingiber brevifolium. (*G. C.* 1886, xxvi. 390.) Scitamineæ. S. A dwarf Ginger about 1 ft. high. Stems naked below, with a few oblong-lanceolate or elliptic l. above, 2–4 in. long, 1¼–1¾ in. broad. Fl.-spike 2¼–3 in. long, fusiform, with adpressed oblong orange-yellow bracts striped with red. Fl. yellow, rather small, with narrow segments, and a narrow 3-lobed lip. Philippines.

Zingiber coloratum. (*G. C.* 1879, xii. 166.) S. Evergreen per. with purplish leafy stems 3 ft. high, bearing distichous lanceolate acuminate subsessile l., and a radical fusiform acute infl. densely covered with crimson bracts. North-west Borneo.

Zingiber Darceyi. (*Veitch Cat.* 1890, 13; *W. G.* 1890, 398; *Gard.* 1890, xxxviii. 43.) S. foliage-plant of robust habit, growing to 2 or 3 ft. high, with lanceolate l. 6–8 in. long by 2–2½ in broad, of a bright green, with a broad cream-white margin, and oblique stripes of the same colour.

Zinnia linearis. (*Gfl.* 1887, 667, f. 171; *G. C.* 1887, ii. 597, f. 115.) Compositæ. H. annual 12–18 in high, branching from the base, with opposite linear or linear-lanceolate l., and solitary radiate heads of a bright deep orange colour, about 1 in. in diam. Mexico.

Zomicarpella maculata. (*G. C.* 1881, xvi. 266.) Araceæ. S. A pretty little Aroid with variegated foliage, somewhat like that of *Caladium marmoratum*, but much smaller. L. ovate, with a deeply cordate-sagittate base, dark green, with a series of irregular pale green blotches arranged around the l. near the margin. Infl. very small. Spathe oblong-lanceolate, spreading out nearly flat, with revolute margins, dull green. Spathe 1½ in. long; spadix twice as long, blackish, very slender, the basal ⅓ bearing unisexual fl., the rest barren. Colombia.

Zygadenus Nuttallii. (*Gfl.* t. 1121, f. 2.) Liliaceæ. H. L. linear, acute, erect; raceme elongated, lax, with white fl. Texas; California.

Zygocolax Veitchii. (*G. C.* 1887, i. 765.) Orchidaceæ. G. A garden hybrid between *Zygopetalum Mackayi crinitum* and *Lycaste jugosa* (*Colax jugosus*).

Zygopetalum brachypetalum stenopetalum. (*Gfl.* t. 1277.) Orchidaceæ. G. A var. with narrow acute sep. and pet. of a purple-brown, marked with green. Lip violaceous with a whitish margin; the basal crest with about 5 crenations. Brazil.

Zygopetalum Burkei. (*G. C.* 1883, xx. 684; *Fl. and P.* 1883, 185; *W. O. A.* t. 142.) G. Sep. and pet. blackish purple inside, with green markings, outside green; lip white, with 13 purple ribs on the callus. Pseudobulbs nearly tetragonous, shining, very thick. Demerara.

Zygopetalum Clayi. (*G. C.* 1877, vii. 684.) S. A garden hybrid between *Z. crinitum* and *Z. maxillare*.

Zygopetalum Crepeauxi. (*R. H.* 1887, 420.) G. A robust tufted species, with small angular pseudobulbs, and shortly-stalked elliptic-ovate l. Fl. rather crowded, showy; sep. and pet. dark red spotted and striped with yellow; lip large, white with violet lines on the margin, and the nerves covered with short violet-rose hairs. Brazil.

Zygopetalum crinito-maxillare. (*Gard.* 1890, xxxviii. 43.) G. A hybrid whose parentage is indicated by the specific name. [*Z. Clayi*, Reichb. f.]

Zygopetalum expansum. (*G. C.* 1878, ix. 168.) S. L. grassy, cuneate-oblong-ligulate, acute. Sep. acute, green; pet. broader, brown in their upper part, blotched with brown in the lower part; lip green, with 5 interrupted brown stripes on the basal half, and similar blotches at the base of the front part, which is fringed. Ecuador (?)

Zygopetalum forcipatum. (*G. C.* 1883, xx. 360.) G. Allied to *Z. graminineum*, with whitish ochre fl. Lip very broad, fringed in front, having two brick-red areas on each side of the callus, and a few purple spots on the front part. Tropical America.

Zygopetalum Gibeziæ. (*L.* iv. t. 181.) G. Very similar to *Z. cochleare*, with cuneate-oblanceolate acute l. and solitary fl. The sep. and pet. are oblong-lanceolate, acute, white, without markings. Lip large and broad, with the sides turned up, white, veined with violet, having a thick crest at the base.

Zygopetalum graminifolium. (*G. C.* 1892, xi. 698; xii. 179; *L.* viii. t. 340.) G. This plant has been in cultivation several years, but it does not appear to have flowered till 1892. It is a small-growing species with a slender creeping rhizome, small pseudobulbs, and narrow grassy l.; raceme erect, bearing from five to seven green and purple fl.

Zygopetalum hemixanthum. (*G. C.* 1888, iv. 206.) G. Allied to *Z. Lalindei*, but distinct in colour, and with numerous tubercles and processes at the base of the crest of keels. Sep. and pet. white. Lip yellow, the crest darker. [Syn. *Bollea hemixantha*, Reichb. f.] Colombia.

Zygopetalum intermedium peruvianum. (*L.* viii. t. 418.) G. A var. with smaller fl. than the type. Peru.

Zygopetalum jorisianum. (*G. C.* 1890, vii. 704; *L.* v. t. 237.) G. With the habit of *Z. intermedium*; lip three-lobed and fimbriate. Venezuela.

Zygopetalum Klabochii. (*G. C.* 1885, xxiv. 391.) G. Sep. and pet. whitish ochre, spotted with purple; lip pure white, fringed, spotted with purple; the callus rather narrow, ligulate, two-toothed. Colombia.

Zygopetalum Klabochorum. (*G. C.* 1879, xi. 684.) G. L. tufted, equitant, lanceolate, 12–15 in. long, 2 in. broad. Fl. with spreading segments, 3½–4 in. in diameter; sep. and pet. more or less incurved at the tips, basal part white, apical part brownish purple; lip white, densely covered with crimson-purple papillæ; column crimson-purple. Ecuador.

Zygopetalum laminatum. (*G. C.* 1885, xxiv. 70.) G. A small-flowered species with rather narrow l., and light yellow fl. with a white lip.

Zygopetalum leopardinum. (*G. C.* 1886, xxvi. 199.) G. A garden hybrid.

Zygopetalum leucochilum. (*G. C.* 1892, xi. 214.) G. A garden hybrid between *Z. Burkei* and *Z. Mackayi*.

Zygopetalum Lindeni. (*L.* vii. t. 337.) S. With lanceolate acute l., and solitary large white fl. veined with rose-purple on the very large lip. [Syn. *Warscewiczella Lindeni*, Hort.]

Zygopetalum Lindeniæ. (*L.* vi. t. 275; *O. R.* 1894, 270.) S. A distinct species with narrow lanceolate acute sep. and pet. of a light rosy colour, and a large ovate acute lip white with very numerous rose-coloured veins; crest large and thick, rather darker. Venezuela.

Zygopetalum lucidum. (*G. C.* 1889, v. 799.) S. Belongs to the section *Huntleya*, and is like *Z. Meleagris*, but smaller and also different in colour. British Guiana.

Zygopetalum mystacinum. (*G. C.* 1881, xv. 530.) G. In the way of

Z. (*Kefersteinia*) *gramineum*, with yellowish green fl. ; lip fringed, the callus and stalk white. [Syn. *Kefersteinia mystacina*, Reichb. f.] Colombia.

Zygopetalum obtusatum. (*G. C.* 1878, x. 300.) G. Near *Z. maxillare*, with a long raceme, blunt bracts, narrow long blunt sep. and pet. green with narrow transverse brown bars, and a very light violet lip, with a more purple retuse lower callus.

Zygopetalum pentachromum. (*G.C.* 1885, xxiii. 532.) G. A garden hybrid between *Z. Mackayi* and *Z. maxillare*.

Zygopetalum Perrenoudi. (*J. O.* 1894, 42 ; *G.C.* 1896, xix. 337, 367, f. 50.) G. A garden hybrid between *Z. intermedium* and *Z. Gautieri*.

Zygopetalum pictum. (*G. C.* 1883, xx. 8.) S. Much in the way of *Z. discolor*, differing chiefly in the lip, which is rhomboid and crisped, yellowish white with numerous broad marginal dark purple lines, brownish basal borders, and a greenish tablet-like basal callus, with two teeth in front and a few parallel ones on the sides ; sepals pale greenish, or yellowish white. Also known as *Warscewiczella picta*. Tropical America.

Zygopetalum sanderianum. (*Gfl.* t. 1287.) S. Stem slender, creeping, bearing ovoid pseudobulbs separated from one another by considerable intervals. L. lanceolate, acute. Scape few-flowered. Sep. and pet. lanceolate, acute, green, speckled with brown at the base. Lip obovate, very obtuse, slightly crenate, with a triangular crenate crest at the base, blue-purple.

Zygopetalum Wendlandi. (*Gfl.* t. 1267 ; *G. C.* 1888, iv. 509 ; *R.* ser. 2, t. 53.) S. A fine species, with narrow lanceolate acute l., and solitary fl. about 2½ in. in expanse, on scapes 3–4 in. long. Sep. and pet. lanceolate, acute, undulately curved, light greenish. Lip angled at the base on each side, constricted at the middle, then expanded into a large cordate-reniform wavy front lobe, which is strongly revolute at the tip, white, with the semicircular many-rayed crest at the base and the disk in front of it violaceous. [Syn. *Bollea wendlandiana*, Hort. ; *G. and F.* 1888, 315.] Costa Rica.

—— Var. **discolor.** (*W. O. A.* t. 126.) S. Fl. large, green, with a white lip marked with a broad violet-purple central band. Costa Rica.

Zygopetalum Whitei. (*G. C.* 1890, vii. 354 ; *O.* 1890, 194.) S. L. about 1 ft. long ; scape short ; fl. 2½ in. in diameter, creamy white ; lip partly yellow. Colombia.

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